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FILE 'HOME' ENTERED AT 11:39:08 ON 11 FEB 2003
=> file biosis,caba,caplus,embase,japio,lifesci,medline,scisearch,uspatfull
=> e hajizadeh kiamars/au
E1
       1 HAJIZADEH JALIL/AU
E2
       20 HAJIZADEH K/AU
E3
       19 --> HAJIZADEH KIAMARS/AU
       3 HAJIZADEH N/AU
E4
E5
       2 HAJIZADEH NEGIN/AU
E6
       23 HAJIZADEH S/AU
E7
       7 HAJIZADEH SAFFAR M/AU
E8
       2 HAJIZADEH SAFFAR MOHSEN/AU
       6 HAJIZADEH SOHRAB/AU
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        1 HAJIZADOO/AU
E12
       17 HAJJ A/AU
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       39 ("HAJIZADEH K"/AU OR "HAJIZADEH KIAMARS"/AU)
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=> dup rem 11
PROCESSING COMPLETED FOR L1
        19 DUP REM L1 (20 DUPLICATES REMOVED)
=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 19 ANSWERS - CONTINUE? Y/(N):y
L2 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2003 ACS
                                                     DUPLICATE 1
AN 2002:833195 CAPLUS
DN 137:291265
TI Electrochemical sensor and method thereof
IN Rappin, Craig; ***Hajizadeh, Kiamars***; Mills, Kelly
PA USA
SO U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. Ser. No. 820,372.
  CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2
  PATENT NO.
                 KIND DATE
                                  APPLICATION NO. DATE
PI US 2002157947 A1 20021031
                                  US 2001-17751 20011207
  WO 2002077606 A2 20021003
                                  WO 2002-US8703 20020322
    W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
      CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
      GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
      LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
      PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
      UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
      CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
      BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-820372 A2 20010323
  US 2001-17751 A 20011207
AB A sensor is provided for the detn. of various concns. of one or more
  components within a fluid sample. The sensor includes an injection molded
  body, at least two electrodes, an enzyme, and if desired, an electron
  transfer mediator. The body includes a reaction zone for receiving a
  fluid sample. The electrodes are at least partially embedded within the
```

plastic body and extend into the reaction zone. Also contained within the

reaction zone is an enzyme capable of catalyzing a reaction involving a compd. within the fluid sample. Addnl., the sensor incorporates fill detection which activates a meter, attached to the sensor, for measuring the electrochem. changes occurring in the reaction zone.

```
L2 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2003 ACS
AN 2002:754674 CAPLUS
DN 137:228911
TI Electrochemical sensor and method thereof
IN Rappin, Craig; ***Hajizadeh, Kiamars***; Mills, Kelly
PA Virotek, LLC, USA
SO PCT Int. Appl., 34 pp.
  CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2
                                  APPLICATION NO. DATE
  PATENT NO.
                 KIND DATE
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PI WO 2002077606 A2 20021003 WO 2002-US8703 20020322 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2001-17751 20011207 US 2002157947 A1 20021031 PRAI US 2001-820372 A 20010323

US 2001-17751 A 20011207

AB A sensor is provided for the detn. of various concns. of one or more components within a fluid sample. The sensor includes an injection molded body, at least two electrodes, an enzyme, and if desired, an electron transfer mediator. The body includes a reaction zone for receiving a fluid sample. The electrodes are at least partially embedded within the plastic body and extend into the reaction zone. Also contained within the reaction zone is an enzyme capable of catalyzing a reaction involving a compd. within the fluid sample. Addnl., the sensor incorporates fill detection which activates a meter, attached to the sensor, for measuring the electrochem. changes occurring in the reaction zone.

# L2 ANSWER 3 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE

AN 2001:348990 BIOSIS

DN PREV200100348990

TI Immunochromatographic assay.

AU \*\*\*Hajizadeh, Kiamars (1)\*\*\*; Wijesuriya, Dayaweera

CS (1) Granger, IN USA

**ASSIGNEE: Bayer Corporation** 

PI US 6180417 January 30, 2001

SO Official Gazette of the United States Patent and Trademark Office Patents, (Jan. 30, 2001) Vol. 1242, No. 5, pp. No Pagination. e-file. ISSN: 0098-1133.

DT Patent

### LA English

AB Disclosed is a device and method for carrying out an assay for an analyte in a fluid test sample by immunochromatography. The device involves a strip having a non-porous receiving member of a hydrophobic material in direct fluid communication with a reagent region of an absorbent material through which the fluid test sample can flow by capillarity. By applying the fluid test sample to the non-porous hydrophobic receiving member rather than directly to the absorbent material the reliability of the assay is enhanced.

## L2 ANSWER 4 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE

AN 2001:195183 BIOSIS

DN PREV200100195183

TI Dual particle immunoassay method and kit.

AU \*\*\*Hajizadeh, Kiamars (1)\*\*\*; Hudak, Robert T.; Stave, James W.

CS (1) Bear, DE USA

ASSIGNEE: Strategic Diagnostics Inc., Newark, DE, USA; EM Industries, Inc., Hawthorne, NY, USA

PI US 6096563 August 01, 2000

SO Official Gazette of the United States Patent and Trademark Office Patents, (Aug. 1, 2000) Vol. 1237, No. 1, pp. No Pagination. e-file. ISSN: 0098-1133.

DT Patent

LA English

AB A dual particle immunoassay method and kit for detecting analyte in a sample in which the sample to be analyzed, a binding molecule specific for the analyte, and a particle coated with the analyte to be detected or coated with a second binding molecule are reacted and applied to a porous membrane. The competitive immunoassay utilizes an analyte-coated particle, whereas the sandwich immunoassay employs a second binding molecule-coated particle. All of the reagents except for the coated particle are able to pass through the porous membrane. Detectable particles coated with a binding substance that binds to the binding molecule, such as protein A protein G, second antibody reactive to the binding molecule, or a small synthetic affinity ligand, are reacted with coated particles retained on the membrane surface. The detectable particles will pass through the membrane if not complexed with the coated particle. In the competitive immunoassay, detectable particles bind to binding molecules that complex with the analyte-coated particles in the absence of analyte and are detected. In the sandwich immunoassay, detectable particles bind to binding molecules that are attached to the coated particle in the presence of analyte and are detected.

## L2 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2003 ACS

AN 2000:756024 CAPLUS

DN 133:278341

TI Immunochromatographic assay

IN \*\*\*Hajizadeh, Kiamars\*\*\*; Wijesuriya, Dayaweera

PA Bayer Corporation, USA

SO Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

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PATENT NO. KIND DATE
                                      APPLICATION NO. DATE
PI EP 1046913 A2 20001025
                                    EP 2000-107144 20000410
   EP 1046913 A3 20001129
     R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
       IE, SI, LT, LV, FI, RO
                  B1 20010130
                                    US 1999-295575 19990422
   US 6180417
   JP 2000321278 A2 20001124
                                    JP 2000-119211 20000420
PRAI US 1999-295575 A 19990422
AB Disclosed is a device and method for carrying out an assay for an analyte
   in a fluid test sample by immunochromatog. The device involves a strip
   having a nonporous receiving member of a hydrophobic material in direct
   fluid communication with a reagent region of an absorbent material through
   which the fluid test sample can flow by capillarity. By applying the
   fluid test sample to the nonporous hydrophobic receiving member rather
   than directly to the absorbent material the reliability of the assay is
   enhanced.
L2 ANSWER 6 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1999:161542 BIOSIS
DN PREV199900161542
TI A new visual point-of-contact PSA test: Results of a pilot study.
AU Tingleaf, Clark; Shariat, Shahrokh; Huffman, Henry; Wians, Frank;
   Roehrborn, Claus G.; ***Hajizadeh, Kiamars***; Meritt, Lisa; Schulman,
   Lloyd; Wijesuriya, Daya; Sommer, Ronald
CS Dallas, TX USA
SO Journal of Urology, (April, 1999) Vol. 161, No. 4 SUPPL., pp. 209.
   Meeting Info.: 94th Annual Meeting of the American Urological Association,
   Inc. Dallas, Texas, USA May 1-6, 1999 American Urological Association
   . ISSN: 0022-5347.
DT Conference
LA English
L2 ANSWER 7 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
AN 1993:401397 BIOSIS
DN PREV199345060222
TI Dual-antibody systems for the construction of biosensors.
AU Schramm, W. (1); Paek, S.-H. (1); Kuo, H.-H. (1); ***Hajizadeh, K.***
CS (1) Reproductive Sci. Program, The Univ. Mich., Ann Arbor, MI 48109 USA
SO Scheller, F. [Editor]; Schmid, R. D. [Editor]. GBF Monographs, (1992) Vol.
   17, pp. 443-451. GBF Monographs; Biosensors: Fundamentals, technologies
   and applications.
   Publisher: VCH Verlagsgesellschaft mbH Postfach 10 11 61, Boschstrasse 12,
   D-6940 Weinheim, Germany.
   Meeting Info.: BMFT (Bundesministerium fuer Forschung und Technologie);
   (National Ministry of Research and Technology, Bonn) Status Seminar with
   International Participation Brandenburg, Germany May 12-14, 1991
   ISSN: 0930-4320. ISBN: 3-527-28437-0, 1-56081-220-6.
DT Article
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L2 ANSWER 8 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 5

AN 1991:473760 BIOSIS

LA English

DN BA92:107520

TI CHEMICAL CROSS-LINKING OF A REDOX MEDIATOR THIONIN FOR ELECTROCATALYTIC OXIDATION OF NADH.

AU \*\*\*HAJIZADEH K\*\*\*; TANG H T; HALSALL H B; HEINEMEAN W R

CS DEP. CHEM., UNIV. CINCINNATI, CINCINNATI, OHIO 45221-0172.

SO ANAL LETT, (1991) 24 (8), 1453-1470. CODEN: ANALBP. ISSN: 0003-2719.

FS BA; OLD

LA English

AB Thionin, a redox mediator that has been used to study the electrochemical behavior of reduced .beta.-nicotinamide adenine dinucleotide (NADH), was chemically cross-linked on the surface of a spectroscopic graphite electrode by using a triisocyanate cross-linking agent. The electrodes modified in this manner had a purple film with an additional reversible redox couple at E.degree.' of +73 mV vs. Ag/AgCl compared to uncross-linked thionin. The thionin modified electrode mediated oxidation of NADH with response to NADH between 7.0 .times. 10-7 to 1.8 .times. 10-3 M, a sensitivity of 113 .mu.A/cm2/mM, and a detection limit of 0.5 .mu.M.

### L2 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2003 ACS

AN 1991:602258 CAPLUS

DN 115:202258

TI Biosensor selectivity by gamma radiation-crosslinked polymers

AU Heineman, William R.; \*\*\*Hajizadeh, Kiamars\*\*\*; Coury, Louis A., Jr.

CS Edison Sens. Technol. Cent., Univ. Cincinnati, Cincinnati, OH, 45221-0172, USA

SO Polymeric Materials Science and Engineering (1991), 64, 324 CODEN: PMSEDG; ISSN: 0743-0515

DT Journal

LA English

AB Poly(N-vinylpyrrolidone), poly(vinyl alc.), and Nafion were used to achieve selectivity in the development of biosensors for the detn. of neurotransmitters and lactate.

## L2 ANSWER 10 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 6

AN 1991:135255 BIOSIS

DN BA91:71795

TI FLOW-INJECTION ANALYSIS WITH ELECTROCHEMICAL DETECTION OF REDUCED NICOTINAMIDE ADENINE DINUCLEOTIDE USING 2 6 DICHLOROINDOPHENOL AS A REDOX COUPLING AGENT.

AU TANG HT; \*\*\*HAJIZADEH K\*\*\*; HALSALL HB; HEINEMAN WR

CS BIOMED CHEM. RES. CENT., DEP. CHEM., UNIV. CINCINNATI, CINCINNATI, OHIO 45221-0172.

SO ANAL BIOCHEM, (1991) 192 (1), 243-250. CODEN: ANBCA2. ISSN: 0003-2697.

FS BA; OLD

LA English

AB The determination of reduced nicotinamide adenine dinucleotide (NADH) by electrochemical oxidation requires a more positive potential than is predicted by the formal reduction potential for the NAD+/NADH couple. This problem is alleviated by use of 2,6-dichloroindophenol (DCIP) as a redox coupling agent for NADH. The electrochemical characteristics of DCIP at the glassy carbon electrode are examined by cyclic voltammetry and hydrodynamic voltammetry. NADH is determined by reaction with DCIP to form

NAD+ and DCIPH2. DCIPH2 is then quantitated by flow-injection analysis with electrochemical detection by oxidation at a detector potential of +0.25 V at pH 7. NADH is determined over a linear range of 0.5 to 200 .mu.M and with a detection limit of 0.38 .mu.M. The lower detection potential for DCIPH2 compared to NADH helps to minimize interference from oxidizable components in serum samples.

L2 ANSWER 11 OF 19 SCISEARCH COPYRIGHT 2003 ISI (R)

AN 91:237291 SCISEARCH

GA The Genuine Article (R) Number: FG894

TI BIOSENSOR SELECTIVITY BY GAMMA-RADIATION CROSS-LINKED POLYMERS

AU HEINEMAN W R (Reprint); \*\*\*HAJIZADEH K\*\*\*; COURY L A

CS UNIV CINCINNATI, EDISON SENSOR TECHNOL CTR, DEPT CHEM, CINCINNATI, OH, 45221

CYA USA

SO ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, (1991) Vol. 201, No. APR, pp. 187-PMSE.

DT Conference; Journal

LA ENGLISH

**REC** No References

L2 ANSWER 12 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE

AN 1991:177281 BIOSIS

DN BA91:92030

TI IMMOBILIZATION OF LACTATE OXIDASE IN A POLYVINYL ALCOHOL MATRIX ON PLATINIZED GRAPHITE ELECTRODES BY CHEMICAL CROSS-LINKING WITH ISOCYANATE.

AU \*\*\*HAJIZADEH K\*\*\*; HALSALL H B; HEINEMAN W R

CS DEP. CHEM., UNIV. CINCINNATI, CINCINNTATI, OHIO 45221-0172, USA.

SO TALANTA, (1991) 38 (1), 37-48.

CODEN: TLNTA2. ISSN: 0039-9140.

FS BA; OLD

LA English

AB A new method for development of an electrochemical sensor based on lactate oxidase is described. Platinized spectroscopic-grade graphite electrodes were modified by chemically cross-linking L-lactate oxidase from Pediococcus species into a poly(vinyl alcohol) network through reaction with a tri-isocyanate. The immobilized enzyme exhibits high activity and long-term stability. The sensor provides a linear response to L-lactate over a concentration range of 2 .times. 10-5-4 .times. 10-3M and a sensitivity of 1.71 .mu.A.1.mmole-1. The response time of the sensor is 10-45 sec and the detection limit is 10.mu.M. Stable response to the substrate was obtained over a period of 3 months. The new sensor was also used for the analysis of some dairy products without any special pretreatment.

L2 ANSWER 13 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE

AN 1991:203004 BIOSIS

DN BA91:106229

TI GAMMA-IRRADIATION IMMOBILIZATION OF LACTATE OXIDASE IN POLYVINYL ALCOHOL ON PLATINIZED GRAPHITE ELECTRODES.

AU \*\*\*HAJIZADEH K\*\*\*; HALSALL H B; HEINEMAN W R

CS BIOQUANT, INT., 1919 GREEN RD., ANN ARBOR, MICH. 48105.

SO ANAL CHIM ACTA, (1991) 243 (1), 23-32.

CODEN: ACACAM. ISSN: 0003-2670.

FS BA; OLD

LA English

AB A novel method for enzyme immobilization in a polymer matrix was examined with lactate oxidase (LOD) to make a sensor for lactate. Poly(vinyl alcohol) (PVAL) and LOD were applied in layers on platinized graphite electrodes and cross-linked by exposure to a 60Co gamma radiation source. When the sensor is dipped in lactate solution, the product of the enzymatic reaction, hydrogen peroxide, is detected at +300 mV vs. Ag/AgCl. The LOD-PVAL lactate sensor exhibits a fast response (10-50 s), a linear range between 26 .mu.M and 1.7 mM, a detection limit of 13 .mu.M and a sensitivity of 2.94 .mu.A mmol-1. The sensitivity and the linearity of the electrode were improved considerably by bubbling oxygen continuously through the lactate solution. Optimum response to lactate was obtained with a radiation dose of 3-10 Mrad. LOD was found to be active in the presence of the polymer under radiation doses as high as 40 Mrad. Repeated use of the sensors under various conditions showed a stable and reproducible response to lactate for over 80 days.

### L2 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2003 ACS

AN 1991:530881 CAPLUS

DN 115:130881

TI Evaluation of electrochemical biosensors: strategies in development of prototype enzyme and antibody-based modified electrodes

AU \*\*\*Hajizadeh, Kiamars\*\*\*

CS Univ. Cincinnati, Cincinnati, OH, USA

SO (1990) 226 pp. Avail.: Univ. Microfilms Int., Order No. DA9108614 From: Diss. Abstr. Int. B 1991, 51(11), 5275-6

DT Dissertation

LA English

AB Unavailable

## L2 ANSWER 15 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE

AN 1990:68930 BIOSIS

DN BA89:36756

TI A NEW METHOD FOR ENZYME MEMBRANE PREPARATION BASED ON POLYURETHANE TECHNOLOGY ELECTRODE MODIFICATION FOR SENSOR DEVELOPMENT.

AU GALIATSATOS C; \*\*\*HAJIZADEH K\*\*\*; MARK J E; HEINEMAN W R

CS EDISON SENSOR TECHNOL. CENTER, DEP. CHEM., UNIV. CINCINNATI, CINCINNATI, OHIO 45221-0172, USA.

SO BIOSENSORS, (1989) 4 (6), 393-402. CODEN: BISSED. ISSN: 0265-928X.

FS BA; OLD

LA English

AB The new method developed for enzyme membrane preparation is based on cross-linking poly(vinyl alcohol) (PVAL) with triisocyanate (TIC) in the presence of enzyme. Dimethylsulfoxide (DMSO) was the only solvent found to dissolve PVAL, TIC and enzyme at room temperature, without completely denaturing the latter. The rate of gelation to form the desired network membrane can be controlled by the amount of solvent used. All the enzymes tested (alkaline phosphatase and alcohol, cholesterol and glucose oxidases) dissolved in DMSO and retained sufficient activity for use in electrochemical sensors. Membranes were formed on both graphite and platinized graphite electrodes. The resulting prototypes sensors were

examined with regard to feasibility of preparation, adhesion of the gels to the electrode sufaces, swelling properties of the gels in DMSO and aqueous buffers, and their electrochemical properties.

L2 ANSWER 16 OF 19 SCISEARCH COPYRIGHT 2003 ISI (R)

AN 89:140093 SCISEARCH

GA The Genuine Article (R) Number: T5776

TI ELECTROANALYSIS AT GAMMA-IRRADIATED POLYMER MODIFIED ELECTRODES

AU HEINEMAN W R (Reprint); COURY L A; GALIATSATOS C; \*\*\*HAJIZADEH K\*\*\*; HUBER E W; SMITH D A; SPONAUGLE S K

CS UNIV CINCINNATI, DEPT CHEM, EDISON SENSOR TECHNOL CTR, CINCINNATI, OH, 45221

CYA USA

SO ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, (1989) Vol. 197, No. APR, pp. 50-ANYL.

DT Conference; Journal

LA ENGLISH

**REC No References** 

L2 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 10

AN 1980:506477 CAPLUS

DN 93:106477

TI Optically transparent thin-layer electrochemical flow cell for liquid chromatography

AU Pinkerton, Thomas C.; \*\*\*Hajizadeh, Kiamars\*\*\*; Deutsch, Edward; Heineman, William R.

CS Dep. Chem., Univ. Cincinnati, Cincinnati, OH, 45221, USA

SO Analytical Chemistry (1980), 52(9), 1542-4 CODEN: ANCHAM; ISSN: 0003-2700

DT Journal

LA English

AB An optically transparent thin-layer electrode (OTTLE) flow cell is described for use with liq. chromatog. The chromatog. eluent flows directly into the OTTLE cell, thus enabling individual components to be examd. by spectroelectrochem. as they elute from the chromatograph. The Au minigrid working electrode and a parallel auxiliary electrode are sandwiched between a quartz plate and Teflon spacer. The cell is positioned in a rapid scan spectrophotometer. The cell was illustrated on a radiopharmaceutical analog consisting of 99Tc (NH2OH)-HEDP (HEDP = hydroxyethylidene diphosphonate) complex mixt. which was prepd. by the redn. of pertechnetate with NH2OH.HCl in presence of HEDP. The mixt. was sepd. on an anion-exchange column. The eluting complex components were visually monitored on a storage oscilloscope. With the sepd. component trapped in the OTTLE cell, thin-layer cyclic voltammetry or spectropotentiostatic characterization was performed.

L2 ANSWER 18 OF 19 SCISEARCH COPYRIGHT 2003 ISI (R)

AN 79:225310 SCISEARCH

GA The Genuine Article (R) Number: GN805

TI SEPARATION AND ELECTROCHEMISTRY OF TC-99-EHDP COMPLEXES

AU HEINEMAN W R (Reprint); DEUTSCH E; PINKERTON T C; \*\*\*HAJIZADEH K\*\*\*

CS UNIV CINCINNATI, DEPT CHEM, CINCINNATI, OH, 45221

CYA USA

SO ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, (1979) Vol. 1979, No. APR, pp. 52.

DT Conference; Journal LA ENGLISH REC No References

L2 ANSWER 19 OF 19 JAPIO COPYRIGHT 2003 JPO

AN 2000-321278 JAPIO

TI IMPROVED IMMUNOCHROMATOGRAPHIC ANALYSIS

IN \*\*\*HAJIZADEH KIAMARS\*\*\*; WIJESURIYA DAYAWEERE

PA BAYER CORP

PI JP 2000321278 A 20001124 Heisei

AI JP 2000-119211 (JP2000119211 Heisei) 20000420

PRAI US 1999-295575 19990422

SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2000

AB PROBLEM TO BE SOLVED: To provide an analytical method which uses an immunochromatographic test strip which can perform an analysis by using a liquid test sample in a small amount.

SOLUTION: This analytical method provides an immunochromatographic test strip which is used to measure the existence or the concentration of an object, to be analyzed, in a liquid test sample. In addition, in the analytical method, a liquid receiving member is coated with the liquid test sample in such a way that a part of it comes directly into contact with a water absorbing material in the reagent region of the immunochromatographic test strip.

COPYRIGHT: (C)2000, JPO

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=> s prion? and (diagnos? or detection?)
       5333 PRION? AND (DIAGNOS? OR DETECTION?)
       3500 DUP REM L3 (1833 DUPLICATES REMOVED)
=> s 14 and (test strip?)
 8 FILES SEARCHED...
        81 L4 AND (TEST STRIP?)
L5
=> s 15 and (proteinase k)
        0 L5 AND (PROTEINASE K)
=> s 15 and (proteinase)
        12 L5 AND (PROTEINASE)
L7
=> d 17 bib ab kwic
L7 ANSWER 1 OF 12 USPATFULL
AN 2003:30391 USPATFULL
TI Kunitz-type protease inhibitor polynucleotides, polypeptides, and
    antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
   Ni, Jian, Germantown, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S.
   corporation)
PI US 2003022338
                      A1 20030130
AI US 2002-125522 A1 20020419 (10)
RLI Continuation of Ser. No. US 2001-858718, filed on 17 May 2001, PENDING
   Continuation-in-part of Ser. No. WO 2000-US31917, filed on 21 Nov 2000,
   UNKNOWN
PRAI US 1999-166751P 19991122 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 12021
    The present invention relates to novel human KTPI polypeptides and
    isolated nucleic acids containing the coding regions of the genes
    encoding such polypeptides. Also provided are vectors, host cells,
    antibodies, and recombinant methods for producing human KTPI
   polypeptides. The invention further relates to ***diagnostic*** and
   therapeutic methods useful for ***diagnosing*** and treating
    disorders related to these novel human KTPI polypeptides.
AB . . . Also provided are vectors, host cells, antibodies, and
   recombinant methods for producing human KTPI polypeptides. The invention
    further relates to ***diagnostic*** and therapeutic methods useful
    for ***diagnosing*** and treating disorders related to these novel
   human KTPI polypeptides.
SUMM . . . vectors, host cells, and recombinant and synthetic methods for
    producing human KTPI polynucleotides and/or polypeptides. The invention
    further relates to ***diagnostic*** and therapeutic methods useful
    for ***diagnosing***, treating, preventing and/or prognosing
    disorders related to these novel KTPI polypeptides. The invention
    further relates to screening methods for identifying. . .
SUMM . . . derivatives, agonists and antagonists at the nucleic acid and
   protein levels which in turn have applications in the treatment and
     ***diagnosis*** of a range of conditions such as cancer, inflammation,
    neurological disorders and blood clotting disorders, amongst other
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- conditions.
- SUMM . . . to the polynucleotides of the present invention at lower stringency hybridization conditions. Changes in the stringency of hybridization and signal \*\*\*detection\*\*\* are primarily accomplished through the manipulation of formamide concentration (lower percentages of formamide result in lowered stringency); salt conditions, or. . .
- SUMM . . . are useful as reagents for differential identification of the tissue(s) or cell type(s) present in a biological sample and for \*\*\*diagnosis\*\*\* of diseases and conditions which include but are not limited to: diseases and/or disorders of the nervous system, reproductive system. . .
- SUMM . . . to the central nervous system. Accordingly, polynucleotides, translation products and antibodies corresponding to this genes may be useful for the \*\*\*diagnosis\*\*\*, prognosis, prevention, and/or treatment of neurological diseases such as Alzheimer's disease, Parkinson's disease, multiple sclerosis, amyotrophic lateral sclerosis, and/or as. . .
- SUMM . . . as in fetal liver tissue, indicates that polynucleotides, translation products and antibodies corresponding to this gene are useful for the \*\*\*diagnosis\*\*\*, prognosis, prevention, and/or treatment of diseases and/or disorders of the reproductive and immune systems, including cancers thereof.
- SUMM . . . The distribution in testes tissue indicates that polynucleotides, translation products and antibodies corresponding to this gene are useful for the \*\*\*diagnosis\*\*\*, prognosis, prevention, and/or treatment of conditions concerning proper testicular function (e.g. endocrine function, sperm maturation), as well as cancer. Therefore, . . (antagonists) are useful as male contraceptive agents. Similarly, translation products of this gene are believed to be useful in the \*\*\*diagnosis\*\*\*, prognosis, prevention, and/or treatment of testicular cancer. The testes are also a site of active gene expression of transcripts that. . .
- SUMM . . . bound to a solid support and the bodily fluid is serum. The above embodiments, as well as other treatments and \*\*\*diagnostic\*\*\* tests (kits and methods), are more particularly described elsewhere herein.
- SUMM . . . by boosting immune responses). Furthermore, polynucleotides, translation products and antibodies corresponding to this gene may be also used in the \*\*\*diagnosis\*\*\* , prognosis, prevention, and/or treatment of immunological disorders including arthritis, asthma, immune deficiency diseases such as AIDS, leukemia, rheumatoid arthritis, inflammatory. . .
- SUMM . . . are useful as reagents for differential identification of the tissue(s) or cell type(s) present in a biological sample and for \*\*\*diagnosis\*\*\* of diseases and conditions which include but are not limited to: diseases and/or disorders of the immune system. Similarly, polypeptides. . .
- SUMM . . . The tissue distribution in T-cells indicates that polynucleotides, translation products, and antibodies corresponding to this gene are useful for the \*\*\*diagnosis\*\*\*, prognosis, prevention, and/or treatment of immune system diseases and/or disorders. The tissue distribution in T-cells indicates that translation products of. . by boosting immune responses). Furthermore, polynucleotides, translation products and antibodies corresponding to this gene may be also used in the \*\*\*diagnosis\*\*\*, prognosis, prevention, and/or treatment. of

- immunological disorders including arthritis, asthma, immune deficiency diseases such as AIDS, leukemia, rheumatoid arthritis, inflammatory.
- SUMM . . . plasmid. These probes will also hybridize to nucleic acid molecules in biological samples, thereby enabling a variety of forensic and \*\*\*diagnostic\*\*\* methods of the invention. Similarly, polypeptides identified from SEQ ID NO:Y have uses that include, but are not limited to. . .
- SUMM . . . (5, 4, 3, 2, or 1) nucleotides. These nucleotide fragments have uses that include, but are not limited to, as \*\*\*diagnostic\*\*\* probes and primers as discussed herein. Of course, larger fragments (e.g., at least 150, 175, 200, 250, 500, 600, 1000, . . .
- SUMM . . . human protein or part thereof. In many cases, the Fc part in a fusion protein is beneficial in therapy and \*\*\*diagnosis\*\*\*, and thus can result in, for example, improved pharmacokinetic properties. (EP-A 0232 262.) Alternatively, deleting the Fc part after the. . fusion protein has been expressed, detected, and purified, may be desired. For example, the Fc portion may hinder therapy and \*\*\*diagnosis\*\*\* if the fusion protein is used as an antigen for immunizations. In drug discovery, for example, human proteins, such as.
- SUMM . . . with a gene of interest as an epitope tag (e.g., the hemagglutinin ("HA") tag or flag tag) to aid in \*\*\*detection\*\*\* and purification of the expressed polypeptide. For example, a system described by Janknecht et al. allows for the ready purification. . .
- SUMM . . . may also be modified with a detectable label, such as an enzymatic, fluorescent, isotopic or affinity label to allow for \*\*\*detection\*\*\* and isolation of the protein.
- SUMM . . . limited to, to purify, detect, and target the polypeptides of the present invention, including both in vitro and in vivo

  \*\*\*diagnostic\*\*\* and therapeutic methods. For example, the antibodies have use in immunoassays for qualitatively and quantitatively measuring levels of the polypeptides. . .
- SUMM . . . compositions. For example, antibodies of the present invention may be recombinantly fused or conjugated to molecules useful as labels in \*\*\*detection\*\*\* assays and effector molecules such as heterologous polypeptides, drugs, radionuclides, or toxins. See, e.g., PCT publications WO 92/08495; WO 91/14438; . . .
- SUMM . . . Skerra et al., Science 240:1038-1040 (1988). For some uses, including in vivo use of antibodies in humans and in vitro

  \*\*\*detection\*\*\* assays, it may be preferable to use chimeric, humanized, or human antibodies. A chimeric antibody is a molecule in which. . .
- SUMM . . . al., J. Biochem. 270:3958-3964 (1995)). In many cases, the Fc part in a fusion protein is beneficial in therapy and \*\*\*diagnosis\*\*\*, and thus can result in, for example, improved pharmacokinetic properties. (EP A 232,262). Alternatively, deleting the Fc part after the. . . fusion protein has been expressed, detected, and purified, would be desired. For example, the Fc portion may hinder therapy and \*\*\*diagnosis\*\*\* if the fusion protein is used as an antigen for immunizations. In drug discovery, for example, human proteins, such as.
- SUMM [0224] The present invention further encompasses antibodies or fragments thereof conjugated to a \*\*\*diagnostic\*\*\* or therapeutic agent. The antibodies can be used \*\*\*diagnostically\*\*\* to, for example, monitor

the development or progression of a tumor as part of a clinical testing procedure to, e.g., determine the efficacy of a given treatment regimen.

\*\*\*Detection\*\*\* can be facilitated by coupling the antibody to a detectable substance. Examples of detectable substances include various enzymes, prosthetic groups, . . art. See, for example, U.S. Pat. No. 4,741,900 for metal ions which can be conjugated to antibodies for use as \*\*\*diagnostics\*\*\* according to the present invention. Examples of suitable enzymes include horseradish peroxidase, alkaline phosphatase, beta-galactosidase, or acetylcholinesterase; examples of suitable. . .

- SUMM ... "Analysis, Results, And Future Prospective Of The Therapeutic Use Of Radiolabeled Antibody In Cancer Therapy", in Monoclonal Antibodies For Cancer \*\*\*Detection\*\*\* And Therapy, Baldwin et al. (eds.), pp. 303-1.sup.6 (Academic Press 1985), and Thorpe et al., "The Preparation And Cytotoxic Properties. . .
- SUMM . . . (e.g., 3H or 125I) with the antibody of interest in the presence of increasing amounts of unlabeled antigen, and the \*\*\*detection\*\*\* of the antibody bound to the labeled antigen. The affinity of the antibody of interest for a particular antigen and. . .
- SUMM . . . herein, one of ordinary skill in the art will know how to use the antibodies of the present invention for \*\*\*diagnostic\*\*\*, monitoring or therapeutic purposes without undue experimentation.
- SUMM [0279] \*\*\*Diagnosis\*\*\* and Imaging
- SUMM [0280] Labeled antibodies, and derivatives and analogs thereof, which specifically bind to a polypeptide of interest can be used for

  \*\*\*diagnostic\*\*\* purposes to detect, \*\*\*diagnose\*\*\*, or monitor diseases, disorders, and/or conditions associated with the aberrant expression and/or activity of a polypeptide of the invention. The invention provides for the \*\*\*detection\*\*\* of aberrant expression of a polypeptide of interest, comprising (a) assaying the expression of the polypeptide of interest. in cells. . .
- SUMM [0281] The invention provides a \*\*\*diagnostic\*\*\* assay for 
  \*\*\*diagnosing\*\*\* a disorder, comprising (a) assaying the expression of 
  the polypeptide of interest in cells or body fluid of an individual. .

  or may provide a means for detecting the disease prior to the 
  appearance of actual clinical symptoms. A more definitive 
  \*\*\*diagnosis\*\*\* of this type may allow health professionals to employ 
  preventative measures or aggressive treatment earlier thereby preventing 
  the development or. . .
- SUMM [0283] One aspect of the invention is the \*\*\*detection\*\*\* and \*\*\*diagnosis\*\*\* of a disease or disorder associated with aberrant expression of a polypeptide of interest in an animal, preferably a mammal and most preferably a human. In one embodiment, \*\*\*diagnosis\*\*\* comprises: a) administering (for example, parenterally, subcutaneously, or intraperitoneally) to a subject an effective amount of a labeled molecule which. . . be cleared to background level); c) determining background level; and d) detecting the labeled molecule in the subject, such that \*\*\*detection\*\*\* of labeled molecule above the background level indicates that the subject has a particular disease or disorder associated with aberrant. . .
- SUMM . . . the size of the subject and the imaging system used will determine the quantity of imaging moiety needed to produce

  \*\*\*diagnostic\*\*\* images. In the case of a radioisotope moiety, for a human subject, the quantity of radioactivity injected will normally range. . . in S. W. Burchiel et al., "Immunopharmacokinetics of Radiolabeled Antibodies and Their Fragments." (Chapter 13 in Tumor

- Imaging: The Radiochemical \*\*\*Detection\*\*\* of Cancer,; S. W. Burchiel and B. A. Rhodes, eds., Masson Publishing Inc. (1982).
- SUMM [0286] In an embodiment, monitoring of the disease or disorder is carried out by repeating the method for \*\*\*diagnosing\*\*\* the disease or disease, for example, one month after initial \*\*\*diagnosis\*\*\*, six months after initial \*\*\*diagnosis\*\*\*, one year after initial \*\*\*diagnosis\*\*\*.
- SUMM . . . able to determine the appropriate method for detecting a particular label. Methods and devices that may be used in the \*\*\*diagnostic\*\*\* methods of the invention include, but are not limited to, computed tomography (CT), whole body scan such as position emission.
- SUMM [0291] In another specific embodiment of the present invention, the kit is a \*\*\*diagnostic\*\*\* kit for use in screening serum containing antibodies specific against proliferative and/or cancerous polynucleotides and polypeptides. Such a kit may. . .
- SUMM [0293] In an additional embodiment, the invention includes a

  \*\*\*diagnostic\*\*\* kit for use in screening serum containing antigens of
  the polypeptide of the invention. The \*\*\*diagnostic\*\*\* kit includes
  a substantially isolated antibody specifically immunoreactive with
  polypeptide or polynucleotide antigens, and means for detecting the
  binding of. . .
- SUMM [0294] In one \*\*\*diagnostic\*\*\* configuration, test serum is reacted with a solid phase reagent having a surface-bound antigen obtained by the methods of the. . .
- SUMM [0296] Thus, the invention provides an assay system or kit for carrying out this \*\*\*diagnostic\*\*\* method. The kit generally includes a support with surface- bound recombinant antigens, and a reporter-labeled anti-human antibody for detecting surface-bound. . .
- SUMM . . . the polynucleotides of the invention. Any of these alterations (altered expression, chromosomal rearrangement, or mutation) can be used as a \*\*\*diagnostic\*\*\* or prognostic marker.
- SUMM [0309] Thus, the invention also provides a \*\*\*diagnostic\*\*\* method useful during \*\*\*diagnosis\*\*\* of a disorder, involving measuring the expression level of polynucleotides of the present invention in cells or body fluid from. . .
- SUMM [0311] Where a \*\*\*diagnosis\*\*\* of a related disorder, including, for example, \*\*\*diagnosis\*\*\* of a tumor, has already been made according to conventional methods, the present invention is useful as a prognostic indicator,. . .
- SUMM [0314] The method(s) provided above may preferrably be applied in a \*\*\*diagnostic\*\*\* method and/or kits in which polynucleotides and/or polypeptides of the invention are attached to a solid support. In one exemplary. . .
- SUMM . . . have uses which include, but are not limited to, detecting cancer in mammals. In particular the invention is useful during

  \*\*\*diagnosis\*\*\* of pathological cell proliferative neoplasias which include, but are not limited to: acute myelogenous leukemias including acute monocytic leukemia, acute. . .
- SUMM [0326] Thus, the invention provides a \*\*\*diagnostic\*\*\* method of a disorder, which involves: (a) assaying gene expression level in cells or body fluid of an individual; (b). . .
- SUMM . . . the very least, the polynucleotides of the present invention can be used as molecular weight markers on Southern gels, as

  \*\*\*diagnostic\*\*\* probes for the presence of a specific mRNA in a

particular cell type, as a probe to "subtract-out" known sequences. .

- SUMM . . . the size of the subject and the imaging system used will determine the quantity of imaging moiety needed to produce

  \*\*\*diagnostic\*\*\* images. In the case of a radioisotope moiety, for a human subject, the quantity of radioactivity injected will normally range. . . in S. W. Burchiel et al., "Immunopharmacokinetics of Radiolabeled Antibodies and Their Fragments" (Chapter 13 in Tumor Imaging: The Radiochemical \*\*\*Detection\*\*\* of Cancer, S. W. Burchiel and B. A. Rhodes, eds., Masson Publishing Inc. (1982)).
- SUMM [0338] Thus, the invention provides a \*\*\*diagnostic\*\*\* method of a disorder, which involves (a) assaying the expression level of a polypeptide of the present invention in cells. . . or may provide a means for detecting the disease prior to the appearance of actual clinical symptoms. A more definitive \*\*\*diagnosis\*\*\* of this type may allow health professionals to employ preventative measures or aggressive treatment earlier thereby preventing the development or . .
- SUMM [0342] \*\*\*Diagnostic\*\*\* Assays
- SUMM [0343] The compounds of the present invention are useful for \*\*\*\*diagnosis\*\*\*, treatment, prevention and/or prognosis of various disorders in mammals, preferably humans. Such disorders include, but are not limited to, neural. . .
- SUMM . . . the invention (including polynucleotides, polypeptides and antibodies of the invention, and fragments and variants thereof) may be used in the \*\*\*diagnosis\*\*\*, \*\*\*detection\*\*\* and/or treatment of diseases and/or disorders associated with aberrant KTPI activity.
- SUMM . . . the invention (including polynucleotides, polypeptides and antibodies of the invention, and fragments and variants thereof) may be used in the \*\*\*diagnosis\*\*\*, \*\*\*detection\*\*\* and/or treatment of diseases and/or disorders relating to blood disorders (e.g., embolisms, stenosis, and/or as described under "Immune activity", "Blood. . .
- SUMM ... embodiment, a polypeptide of the invention, or polynucleotides, antibodies, agonists, or antagonists corresponding to that polypeptide, may be used to \*\*\*diagnose\*\*\*, prognose, prevent, and/or treat disorders associated with the tissue(s) in which the polypeptide of the invention is expressed, including the. . .
- SUMM . . . KTPI expression level in tissues or bodily fluids from an individual not having the disorder. Thus, the invention provides a \*\*\*diagnostic\*\*\* method useful during \*\*\*diagnosis\*\*\* of a disorder, which involves measuring the expression level of the gene encoding the KTPI polypeptide in tissues, cells or. . . an increase or decrease in the gene expression level(s) compared to the standard is indicative of a KTPI disorder. These \*\*\*diagnostic\*\*\* assays may be performed in vivo or in vitro, such as, for example, on blood samples, biopsy tissue or autopsy. . .
- SUMM [0352] The present invention also relates to \*\*\*diagnostic\*\*\* assays such as quantitative and \*\*\*diagnostic\*\*\* assays for detecting levels of KTPI polypeptides, in a biological sample (e.g., cells and tissues), including determination of normal and abnormal levels of polypeptides. Thus, for instance, a \*\*\*diagnostic\*\*\* assay in accordance with the invention for detecting over-expression of KTPI polypeptides compared to normal control tissue samples may be. . .
- SUMM . . . be accomplished, for example, by immunofluorescence techniques employing a fluorescently labeled antibody coupled with light

- microscopic, flow cytometric, or fluorimetric \*\*\*detection\*\*\*.
- SUMM . . . be accomplished, for example, by immunofluorescence techniques employing a fluorescently labeled antibody coupled with light microscopic, flow cytometric, or fluorimetric \*\*\*detection\*\*\*.
- SUMM . . . be accomplished, for example, by immunofluorescence techniques employing a fluorescently labeled antibody coupled with light microscopic, flow cytometric, or fluorimetric \*\*\*detection\*\*\*.
- SUMM . . . of the present invention may, additionally, be employed histologically, as in immunofluorescence, immunoelectron microscopy or non-immunological assays, for in situ \*\*\*detection\*\*\* of KTPI gene products or conserved variants or peptide fragments thereof. In situ \*\*\*detection\*\*\* may be accomplished by removing a histological specimen from a patient, and applying thereto a labeled antibody or KTPI polypeptide. . . a wide variety of histological methods (such as staining procedures) can be modified in order to achieve such in situ \*\*\*detection\*\*\*
- SUMM . . . a test tube, or the external surface of a rod. Alternatively, the surface may be flat such as a sheet, \*\*\*test\*\*\* \*\*\*strip\*\*\*, etc. Preferred supports include polystyrene beads. Those skilled in the art will know many other suitable carriers for binding antibody. . .
- SUMM . . . of nutrients for the relevant hybridoma. Where in vivo imaging is used to detect enhanced levels of KTPI polypeptides for

  \*\*\*diagnosis\*\*\* in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced. . .
- SUMM . . . and visualized in vivo, as discussed, above for labeled antibodies. Further such KTPI polypeptides can be utilized for in vitro \*\*\*diagnostic\*\*\* procedures.
- SUMM . . . the size of the subject and the imaging system used will determine the quantity of imaging moiety needed to produce

  \*\*\*diagnostic\*\*\* images. In the case of a radioisotope moiety, for a human subject, the quantity of radioactivity injected will normally range. . . described in S.W. Burchiel et al., "Immunopharmacokinetics of Radiolabeled Antibodies and Their Fragments" (Chapter 13 in Tumor Imaging: The Radiochemical \*\*\*Detection\*\*\* of Cancer, S. W. Burchiel and B. A. Rhodes, eds., Masson Publishing Inc. (1982)).
- SUMM . . . enzyme and using the linked product in an enzyme immunoassay (EIA) (Voller, A., "The Enzyme Linked Immunosorbent Assay (ELISA)", 1978, \*\*\*Diagnostic\*\*\* Horizons 2:1-7, Microbiological Associates Quarterly Publication, Walkersville, Md.); Voller et al., J. Clin. Pathol. 31:507-520 (1978); Butler, J. E., Meth. . . phosphate isomerase, horseradish peroxidase, alkaline phosphatase, asparaginase, glucose oxidase, beta-galactosidase, ribonuclease, urease, catalase, glucose-6-phosphate dehydrogenase, glucoamylase and acetylcholinesterase. Additionally, the \*\*\*detection\*\*\* can be accomplished by colorimetric methods which employ a chromogenic substrate for the reporter enzyme. \*\*\*Detection\*\*\* may also be accomplished by visual comparison of the extent of enzymatic reaction of a substrate in comparison with similarly. . .
- SUMM [0368] \*\*\*Detection\*\*\* may also be accomplished using any of a variety of other immunoassays. For example, by radioactively labeling the antibodies or. . .
- SUMM . . . a disease or disorder, including cancer and/or as described elsewhere herein. In addition, such proteins may be useful for the \*\*\*detection\*\*\* of other diseases and cancers. The binding agents

- provided herein generally permit \*\*\*detection\*\*\* of the level of antigen that binds to the agent in the biological sample. Polynucleotide primers and probes may be. . .
- SUMM . . . KTPI polypeptide of the invention from the remainder of the sample. The bound polypeptide may then be detected using a \*\*\*detection\*\*\* reagent that contains a reporter group and specifically binds to the binding agent/polypeptide complex. Such \*\*\*detection\*\*\* reagents may comprise, for example, a binding agent that specifically binds to the polypeptide or an antibody or other agent. . .
- SUMM . . . the invention (including polynucleotides, polypeptides and antibodies of the invention, and fragments and variants thereof) may be used in the \*\*\*diagnosis\*\*\*, \*\*\*detection\*\*\* and/or treatment of diseases and/or disorders associated with aberrant KTPI activity.
- SUMM . . . the invention (including polynucleotides, polypeptides and antibodies of the invention, and fragments and variants thereof) may be used in the \*\*\*diagnosis\*\*\*, \*\*\*detection\*\*\* and/or treatment of diseases and/or disorders relating to blood disorders (e.g., embolisms, stenosis, and/or as described under "Immune activity", "Blood. . .
- SUMM [0425] Thus, polynucleotides, translation products and antibodies of the invention are useful in the \*\*\*diagnosis\*\*\*, \*\*\*detection\*\*\* and/or treatment of diseases and/or disorders associated with activities that include, but are not limited to, blood clotting disorders, inflammatory. . .
- SUMM . . . embodiments, a polypeptide of the invention, or polynucleotides, antibodies, agonists, or antagonists corresponding to that polypeptide, may be used to \*\*\*diagnose\*\*\* and/or prognose diseases and/or disorders associated with the tissue(s) in which the polypeptide of the invention is expressed, including the. . .
- SUMM [0427] More generally, polynucleotides, translation products and antibodies corresponding to this gene may be useful for the \*\*\*diagnosis\*\*\*, \*\*\*detection\*\*\* and/or treatment of diseases and/or disorders associated with the following systems.
- SUMM [0429] Polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating, preventing, \*\*\*diagnosing\*\*\* and/or prognosing diseases, disorders, and/or conditions of the immune system, by, for example, activating or inhibiting the proliferation, differentiation, or. . .
- SUMM [0431] Polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating, preventing, \*\*\*diagnosing\*\*\*, and/or prognosing immunodeficiencies, including both congenital and acquired immunodeficiencies. Examples of B cell immunodeficiencies in which immunoglobulin levels B cell. . .
- SUMM [0432] In specific embodiments, ataxia-telangiectasia or conditions associated with ataxia-telangiectasia are treated, prevented,

  \*\*\*diagnosed\*\*\* , and/or prognosing using the polypeptides or polynucleotides of the invention, and/or agonists or antagonists thereof.
- SUMM [0434] In specific embodiments, DiGeorge anomaly or conditions associated with DiGeorge anomaly are treated, prevented,

  \*\*\*diagnosed\*\*\* , and/or prognosed using polypeptides or
- polynucleotides of the invention, or antagonists or agonists thereof. SUMM [0435] Other immunodeficiencies that may be treated, prevented, \*\*\*diagnosed\*\*\* , and/or prognosed using polypeptides or

polynucleotides of the invention, and/or agonists or antagonists

- thereof, include, but are not limited to,. . .
- SUMM [0436] In a preferred embodiment, the immunodeficiencies and/or conditions associated with the immunodeficiencies recited above are treated, prevented, \*\*\*diagnosed\*\*\* and/or prognosed using polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention.
- SUMM [0438] The polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating, preventing, \*\*\*diagnosing\*\*\* and/or prognosing autoimmune disorders. Many autoimmune disorders result from inappropriate recognition of self as foreign material by immune cells. This. . .
- SUMM [0439] Autoimmune diseases or disorders that may be treated, prevented, \*\*\*diagnosed\*\*\* and/or prognosed by polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention include, but are not limited to,. . .
- SUMM [0440] Additional disorders that are likely to have an autoimmune component that may be treated, prevented, and/or \*\*\*diagnosed\*\*\* with the compositions of the invention include, but are not limited to, type II collagen-induced arthritis, antiphospholipid syndrome, dermatitis, allergic. . .
- SUMM [0441] Additional disorders that are likely to have an autoimmune component that may be treated, prevented, \*\*\*diagnosed\*\*\* and/or prognosed with the compositions of the invention include, but are not limited to, scleroderma with anti-collagen antibodies (often characterized, . . .
- SUMM [0442] Additional disorders that may have an autoimmune component that may be treated, prevented, \*\*\*diagnosed\*\*\* and/or prognosed with the compositions of the invention include, but are not limited to, chronic active hepatitis (often characterized, e.g.,. . .
- SUMM . . . preferred embodiment, the autoimmune diseases and disorders and/or conditions associated with the diseases and disorders recited above are treated, prevented, \*\*\*diagnosed\*\*\* and/or prognosed using for example, antagonists or agonists, polypeptides or polynucleotides, or antibodies of the present invention. In a specific preferred embodiment, rheumatoid arthritis is treated, prevented, and/or \*\*\*diagnosed\*\*\* using polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention.
- SUMM [0444] In another specific preferred embodiment, systemic lupus erythematosus is treated, prevented, and/or \*\*\*diagnosed\*\*\* using polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention. In another specific preferred embodiment, idiopathic thrombocytopenia purpura is treated, prevented, and/or \*\*\*diagnosed\*\*\* using polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention.
- SUMM [0445] In another specific preferred embodiment IgA nephropathy is treated, prevented, and/or \*\*\*diagnosed\*\*\* using polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention.
- SUMM . . . preferred embodiment, the autoimmune diseases and disorders and/or conditions associated with the diseases and disorders recited above are treated, prevented, \*\*\*diagnosed\*\*\* and/or prognosed using polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention
- SUMM [0448] Polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating,

- preventing, prognosing, and/or \*\*\*diagnosing\*\*\* diseases, disorders, and/or conditions of hematopoietic cells. Polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention could be. . .
- SUMM [0449] Allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems, may also be treated, prevented, \*\*\*diagnosed\*\*\* and/or prognosed using polypeptides, antibodies, or polynucleotides of the invention, and/or agonists or antagonists thereof. Moreover, these molecules can be used to treat, prevent, prognose, and/or \*\*\*diagnose\*\*\* anaphylaxis, hypersensitivity to an antigenic molecule, or blood group incompatibility..
- SUMM [0450] Additionally, polypeptides or polynucleotides of the invention, and/or agonists or antagonists thereof, may be used to treat, prevent,

  \*\*\*diagnose\*\*\* and/or prognose IgE-mediated allergic reactions. Such allergic reactions include, but are not limited to, asthma, rhinitis, and eczema. In specific. . .
- SUMM [0451] Moreover, polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention have uses in the \*\*\*diagnosis\*\*\*, prognosis, prevention, and/or treatment of inflammatory conditions. For example, since polypeptides, antibodies, or polynucleotides of the invention, and/or agonists or. . . multiple sclerosis; ischemic brain injury and/or stroke,-traumatic brain injury, neurodegenerative disorders (e.g., Parkinson's disease and Alzheimer's disease); AIDS-related dementia; and \*\*\*prion\*\*\* disease); cardiovascular disorders (e.g., atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary bypass complications); as well as many additional diseases, conditions, and. . .
- SUMM [0453] In specific embodiments, polypeptides, antibodies, or polynucleotides of the invention, and/or agonists or antagonists thereof, are useful to \*\*\*diagnose\*\*\*, prognose, prevent, and/or treat organ transplant rejections and graft-versus-host disease. Organ rejection occurs by host immune cell destruction of the. . .
- SUMM [0454] In other embodiments, polypeptides, antibodies, or polynucleotides of the invention, and/or agonists or antagonists thereof, are useful to \*\*\*diagnose\*\*\*, prognose, prevent, and/or treat immune complex diseases, including, but not limited to, serum sickness, post streptococcal glomerulonephritis, polyarteritis nodosa, and. . .
- SUMM [0494] In a specific embodiment, polynucleotides or polypeptides, and/or agonists thereof are used to \*\*\*diagnose\*\*\*, prognose, treat, and/or prevent a disorder characterized by primary or acquired immunodeficiency, deficient serum immunoglobulin production, recurrent infections, and/or immune. . . pneumonia, hepatitis, meningitis, herpes zoster (e.g., severe herpes zoster), and/or pneumocystis carnii. Other diseases and disorders that may be prevented, \*\*\*diagnosed\*\*\*, prognosed, and/or treated with polynucleotides or polypeptides, and/or agonists of the present invention include, but are not limited to, HIV.
- SUMM [0495] In another embodiment, polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention are used to treat, and/or \*\*\*diagnose\*\*\* an individual having common variable immunodeficiency disease ("CVID"; also known as "acquired agammaglobulinemia" and "acquired hypogammaglobulinemia") or a subset of. . .

- SUMM [0496] In a specific embodiment, polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be used to \*\*\*diagnose\*\*\*, prognose, prevent, and/or treat cancers or neoplasms including immune cell or immune tissue-related cancers or neoplasms. Examples of cancers or neoplasms that may be prevented, \*\*\*diagnosed\*\*\*, or treated by polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention include, but are not limited to....
- SUMM . . . In specific embodiments, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be used to prevent, \*\*\*diagnose\*\*\*, prognose, and/or treat thrombosis, arterial thrombosis, venous thrombosis, thromboembolism, pulmonary embolism, atherosclerosis, myocardial infarction, transient ischemic attack, unstable angina. In. . .
- SUMM . . . a polypeptide of the invention, or polynucleotides, antibodies, agonists, or antagonists corresponding to that polypeptide, may be used to prevent, \*\*\*diagnose\*\*\*, prognose, and/or treat diseases and disorders of the blood and/or blood forming organs associated with the tissue(s) in which the. . .
- SUMM . . . The ability to decrease the quantity of blood cells or subsets of blood cells may be useful in the prevention, \*\*\*detection\*\*\*, \*\*\*diagnosis\*\*\* and/or treatment of anemias and leukopenias described below. Alternatively, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present. . . The ability to decrease the quantity of blood cells or subsets of blood cells may be useful in the prevention, \*\*\*detection\*\*\*, \*\*\*diagnosis\*\*\* and/or treatment of leukocytoses, such as, for example eosinophilia.
- SUMM [0507] The polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be used to prevent, treat, or \*\*\*diagnose\*\*\* blood dyscrasia.
- SUMM . . . (hemolysis). The polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating, preventing, and/or \*\*\*diagnosing\*\*\* anemias. Anemias that may be treated prevented or \*\*\*diagnosed\*\*\* by the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention include iron deficiency anemia, hypochromic anemia, microcytic. . hemoclobinuria). The polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating, preventing, and/or \*\*\*diagnosing\*\*\* anemias associated with diseases including but not limited to, anemias associated with systemic lupus erythematosus, cancers, lymphomas, chronic renal disease,. . . spleens. The polynucleotides, polypeptides, antibodies, and/or agonists- or antagonists of the present invention may be useful in treating, preventing, and/or
  - \*\*\*diagnosing\*\*\* anemias arising from drug treatments such as anemias associated with methyldopa, dapsone, and/or sulfadrugs. Additionally, rhe polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating, preventing, and/or \*\*\*diagnosing\*\*\* anemias associated with abnormal red blood cell architecture including but not limited to, hereditary spherocytosis, hereditary elliptocytosis, glucose-6-phosphate dehydrogenase deficiency,. . .
- SUMM [0509] The polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating, preventing, and/or \*\*\*diagnosing\*\*\* hemoglobin abnormalities, (e.g.,

- those associated with sickle cell anemia, hemoglobin C disease, hemoglobin S-C disease, and hemoglobin E disease). Additionally, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating thalassemias, including, but not limited to major and minor forms of alpha-thalassemia and beta-thalassemia.
- SUMM [0510] In another embodiment, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating bleeding disorders including, but not limited to, thrombocytopenia (e.g., idiopathic thrombocytopenic purpura, and thrombotic thrombocytopenic purpura), . . .
- SUMM . . . in a specific embodiment, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating acquired platelet dysfunction such as platelet dysfunction accompanying kidney failure, leukemia, multiple myeloma, cirrhosis of the. . .
- SUMM [0513] In another embodiment, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating diseases and disorders characterized by or associated with increased or decreased numbers of white blood cells... macrophages. In specific embodiments, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating leukopenia. In other specific embodiments, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating leukocytosis.
- SUMM . . . Thus, in specific embodiments, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating decreases in neutrophil numbers, known as neutropenia. Neutropenias that may be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated by the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention include, but are. . .
- SUMM [0515] The polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating lymphocytopenias (decreased numbers of B and/or T lymphocytes), including, but not limited lymphocytopenias resulting from or. . .
- SUMM [0516] The polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating diseases and disorders associated with macrophage numbers and/or macrophage function including, but not limited to, Gaucher's. . .
- SUMM [0517] In another embodiment, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating diseases and disorders associated with eosinophil numbers and/or eosinophil function including, but not limited to, idiopathic.
- $SUMM\ \ .$  . . In yet another embodiment, the polynucleotides, polypeptides,

- antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\* , prognosing, preventing, and/or treating leukemias and lymphomas including, but not limited to, acute lymphocytic (lymphpblastic) leukemia (ALL), acute myeloid (myelocytic,...
- SUMM [0519] In other embodiments, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in \*\*\*diagnosing\*\*\*, prognosing, preventing, and/or treating diseases and disorders of plasma cells including, but not limited to, plasma cell dyscrasias, monoclonal gammaopathies,...
- SUMM . . . embodiments, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in treating, preventing, and/or \*\*\*diagnosing\*\*\* myeloproliferative disorders, including but not limited to, polycythemia vera, relative polycythemia, secondary polycythemia, myelofibrosis, acute myelofibrosis, agnogenic myelod metaplasia, thrombocythemia, . . .
- SUMM . . . In other embodiments, the polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention may be useful in preventing, \*\*\*diagnosing\*\*\*, and/or treating primary hematopoietic disorders.
- SUMM [0531] In another preferred embodiment, polynucleotides or polypeptides, or agonists or antagonists of the present invention are used to

  \*\*\*diagnose\*\*\*, prognose, prevent, and/or treat premalignant conditions and to prevent progression to a neoplastic or malignant state, including but not limited. . .
- SUMM . . . in cell number in a tissue or organ, without significant alteration in structure or function. Hyperplastic disorders which can be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated with compositions of the invention (including polynucleotides, polypeptides, agonists or antagonists) include, but are not limited. . .
- SUMM . . . one type of adult or fully differentiated cell substitutes for another type of adult cell. Metaplastic disorders which can be

  \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated with compositions of the invention (including polynucleotides, polypeptides, agonists or antagonists) include, but are not limited. . .
- SUMM . . . stained nuclei, and exhibit pleomorphism. Dysplasia characteristically occurs where there exists chronic irritation or inflammation. Dysplastic disorders which can be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated with compositions of the invention (including polynucleotides, polypeptides, agonists or antagonists) include, but are not limited. . .
- SUMM [0535] Additional pre-neoplastic disorders which can be
  \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated with
  compositions of the invention (including polynucleotides, polypeptides,
  agonists or antagonists) include, but are not limited. . .
- SUMM . . . embodiment, a polypeptide of the invention, or polynucleotides, antibodies, agonists, or antagonists corresponding to that polypeptide, may be used to \*\*\*diagnose\*\*\* and/or prognose disorders associated with the tissue(s) in which the polypeptide of the invention is expressed, including one, two, three, . .
- SUMM . . . the inhibition of apoptosis. For example diseases associated with increased cell survival or the inhibition of apoptosis that could be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated by polynucleotides, polypeptides, and/or agonists or antagonists of the invention, include cancers (such as follicular lymphomas, . .

- SUMM [0540] Additional diseases or conditions associated with increased cell survival that could be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated by polynucleotides, polypeptides, and/or agonists or antagonists of the invention, include, but are not limited to,. . .
- SUMM [0541] Diseases associated with increased apoptosis that could be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated by polynucleotides, polypeptides, and/or agonists or antagonists of the invention, include AIDS; neurodegenerative disorders (such as. . .
- SUMM [0542] Hyperproliferative diseases and/or disorders that could be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated by polynucleotides, polypeptides, and/or agonists or antagonists of the invention, include, but are not limited to,. . .
- SUMM [0543] Similarly, other hyperproliferative disorders can also be

  \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated by
  polynucleotides, polypeptides, and/or agonists or antagonists of the
  invention. Examples of such hyperproliferative disorders include,...
- SUMM ... herein, one of ordinary skill in the art will know how to use the antibodies of the present invention for \*\*\*diagnostic\*\*\*, monitoring or therapeutic purposes without undue experimentation.
- SUMM [0563] Polynucleotides, polypeptides, antibodies, and/or agonists or antagonists of the present invention, may be used to treat, prevent,

  \*\*\*diagnose\*\*\*, and/or prognose disorders of the renal system. Renal disorders which can be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated with compositions of the invention include, but are not limited to, kidney failure, nephritis, blood vessel. . .
- SUMM [0564] Kidney diseases which can be \*\*\*diagnosed\*\*\*, prognosed, prevented, and/or treated with compositions of the invention include, but are not limited to, acute kidney failure, chronic kidney.
- SUMM [0565] In addition, compositions of the invention can be used to \*\*\*diagnose\*\*\*, prognose, prevent, and/or treat metabolic and congenital disorders of the kidney (e.g., uremia, renal amyloidosis, renal osteodystrophy, renal tubular acidosis, . .
- SUMM [0566] Compositions of the invention can also be used to

  \*\*\*diagnose\*\*\*, prognose, prevent, and/or treat sclerotic or necrotic
  disorders of the kidney (e.g., glomerulosclerosis, diabetic nephropathy,
  focal segmental glomerulosclerosis (FSGS), necrotizing. . .
- SUMM [0569] Polynucleotides or polypeptides, or agonists or antagonists of the present invention, may be used to treat, prevent, \*\*\*diagnose\*\*\*, and/or prognose cardiovascular disorders, including, but not limited to, peripheral artery disease, such as limb ischemia.
- SUMM [0584] Polynucleotides or polypeptides, or agonists or antagonists of the present invention may be used to treat, prevent, \*\*\*diagnose\*\*\*, and/or prognose diseases and/or disorders of the respiratory system.
- SUMM [0602] Moreover, disorders and/or states, which can be treated, prevented, \*\*\*diagnosed\*\*\*, and/or prognosed with the the polynucleotides, polypeptides, agonists and/or agonists of the invention include, but are not limited to, solid.
- SUMM [0614] Diseases associated with increased cell survival or the inhibition of apoptosis that could be treated, prevented,

  \*\*\*diagnosed\*\*\* , and/or prognosed using polynucleotides or polypeptides, as well as antagonists or agonists of the present invention, include cancers (such as. . .
- SUMM [0617] Diseases associated with increased apoptosis that could be treated, prevented, \*\*\*diagnosed\*\*\*, and/or prognesed using polynucleotides or polypeptides, as well as agonists or antagonists of

- the present invention, include, but are not. . .
- SUMM . . . antagonists of the present invention, could be used treat or prevent the onset of diabetes mellitus. In patients with newly

  \*\*\*diagnosed\*\*\* Types I and II diabetes, where some islet cell function remains, polynucleotides or polypeptides, as well as agonists or antagonists. . .
- SUMM [0628] The polynucleotides, polypeptides and agonists or antagonists of the invention may be used for the \*\*\*diagnosis\*\*\* and/or treatment of diseases, disorders, damage or injury of the brain and/or nervous system. Nervous system disorders that can be. . .
- SUMM . . . conductance; neural differentiation, etc. Thus, compositions of the invention (including polynucleotides, polypeptides, and agonists or antagonists) may be used to \*\*\*diagnose\*\*\* and/or treat or prevent diseases or disorders associated with these roles, including, but not limited to, learning and/or cognition disorders.. . . patterns, balance, and perception. In addition, compositions of the invention may also play a role in the treatment, prevention and/or \*\*\*detection\*\*\* of developmental disorders associated with the developing embryo, or sexually-linked disorders.
- SUMM . . . uvemeningoencephalitic syndrome, myelitis such as transverse myelitis, neurosyphilis such as tabes dorsalis, poliomyelitis which includes bulbar poliomyelitis and postpoliomyelitis syndrome,

  \*\*\*prion\*\*\* diseases (such as Creutzfeldt-Jakob Syndrome, Bovine Spongiform Encephalopathy, Gerstmann-Straussler Syndrome, Kuru, Scrapie), and cerebral toxoplasmosis.
- SUMM [0646] Polynucleotides or polypeptides, or agonists or antagonists of the present invention, may be used to treat, prevent, \*\*\*diagnose\*\*\*, and/or prognose disorders and/or diseases related to hormone imbalance, and/or disorders or diseases of the endocrine system.
- SUMM . . . polypeptides (including antibodies) as well as fragments and variants of those polynucleotides, polypeptides, agonists and antagonists, may be used to \*\*\*diagnose\*\*\*, prognose, treat, prevent, or ameliorate diseases and disorders associated with aberrant glucose metabolism or glucose uptake into cells.
- SUMM . . . a specific embodiment, the polynucleotides and/or polypeptides corresponding to this gene and/or agonists and/or antagonists thereof may be used to \*\*\*diagnose\*\*\*, prognose, treat, prevent, and/or ameliorate type I diabetes mellitus (insulin dependent diabetes mellitus, IDDM).
- SUMM . . . In another embodiment, the polynucleotides and/or polypeptides corresponding to this gene and/or agonists and/or antagonists thereof may be used to \*\*\*diagnose\*\*\*, prognose, treat, prevent, and/or ameliorate type II diabetes mellitus (insulin resistant diabetes mellitus).
- SUMM . . . the polynucleotides and/or polypeptides corresponding to this gene and/or antagonists thereof (especially neutralizing or antagonistic antibodies) may be used to \*\*\*diagnose\*\*\*, prognose, treat, prevent, or ameliorate conditions associated with (type I or type II) diabetes mellitus, i ncluding, but not limited. . .
- SUMM . . . embodiment, a polypeptide of the invention, or polynucleotides, antibodies, agonists, or antagonists corresponding to that polypeptide, may be used to \*\*\*diagnose\*\*\*, prognose, prevent, and/or treat endocrine diseases and/or disorders associated with the tissue(s) in which the polypeptide of the invention is. . .
- SUMM [0659] The polynucleotides or polypeptides, or agonists or antagonists

- of the invention may be used for the \*\*\*diagnosis\*\*\*, treatment, or prevention of diseases and/or disorders of the reproductive system. Reproductive system disorders that can be treated by the. . .
- SUMM [0662] Additionally, the compositions of the invention may be useful in the \*\*\*diagnosis\*\*\* , treatment, and/or prevention of disorders or diseases of the penis and urethra, including inflammatory disorders, such as balanoposthitis, balanitis xerotica. . .
- SUMM . . . the vas deferens); additionally, the polynucleotides, polypeptides, and agonists or antagonists of the present invention may be used in the \*\*\*diagnosis\*\*\* , treatment, and/or prevention of diseases and/or disorders of the seminal vesicles, including hydatid disease, congenital chloride diarrhea, and polycystic kidney. . .
- SUMM [0665] Further, the polynucleotides, polypeptides, and agonists or antagonists of the present invention may be used in the \*\*\*diagnosis\*\*\*, treatment, and/or prevention of diseases and/or disorders of the vagina and vulva, including bacterial vaginosis, candida vaginitis, herpes simplex virus,...
- SUMM ... agonists or antagonists of the invention may be useful as a marker or detector of, as well as in the \*\*\*diagnosis\*\*\*, treatment, and/or prevention of congenital uterine abnormalities, such as bicornuate uterus, septate uterus, simple unicornuate uterus, unicornuate uterus with a. . .
- SUMM . . . urticaria of pregnancy. Additionally, the polynucleotides, polypeptides, and agonists or antagonists of the present invention may be used in the \*\*\*diagnosis\*\*\*, treatment, and/or prevention of diseases that can complicate pregnancy, including heart disease, heart failure, rheumatic heart disease, congenital heart disease, . . .
- SUMM [0672] Other disorders and/or diseases of the female reproductive system that may be \*\*\*diagnosed\*\*\*, treated, and/or prevented by the polynucleotides, polypeptides; and agonists or antagonists of the present invention include, for example, Turner's syndrome,...
- SUMM [0677] Moreover, parasitic agents causing disease or symptoms that can be treated, prevented, and/or \*\*\*diagnosed\*\*\* by a polynucleotide or polypeptide and/or agonist or antagonist of the present invention include, but not limited to, the following. . . complications, and toxoplasmosis. polynucleotides or polypeptides, or agonists or antagonists of the invention, can be used to treat, prevent, and/or \*\*\*diagnose\*\*\* any of these symptoms or diseases. In specific embodiments, polynucleotides, polypeptides, or agonists or antagonists of the invention are used to treat, prevent, and/or \*\*\*diagnose\*\*\* malaria.
- SUMM [0685] Polynucleotides or polypeptides, or agonists or antagonists of the present invention, may be used to treat, prevent, \*\*\*diagnose\*\*\*, and/or prognose gastrointestinal disorders, including inflammatory diseases and/or conditions, infections, cancers (e.g., intestinal neoplasms (carcinoid tumor of the small intestine,...
- SUMM [0710] All of these above assays can be used as \*\*\*diagnostic\*\*\* or prognostic markers. The molecules discovered using these assays can be used to treat disease or to bring about a. . .
- SUMM [0796] Also preferred is a method for \*\*\*diagnosing\*\*\* in a subject a pathological condition associated with abnormal structure or expression of a nucleotide sequence of SEQ ID NO:X. . .
- SUMM [0797] The method for \*\*\*diagnosing\*\*\* a pathological condition can comprise a step of detecting nucleic acid molecules comprising a nucleotide sequence in a panel of. . .

- SUMM [0814] Also preferred is a method for \*\*\*diagnosing\*\*\* in a subject a pathological condition associated with abnormal structure or expression of a nucleic acid sequence identified in Table. . .
- DETD . . . the use of anti-coagulants, thrombolytic and/or antiplatelet drugs in combination with Therapeutics of the invention is contemplated for the prevention, \*\*\*diagnosis\*\*\*, and/or treatment of thrombosis, arterial thrombosis, venous thrombosis, thromboembolism, pulmonary embolism, atherosclerosis, myocardial infarction, transient ischemic attack, unstable angina. In. . .
- DETD [0958] For example, a patient \*\*\*diagnosed\*\*\* with abnormally increased levels of a polypeptide is administered intravenously antisense polynucleotides at 0.5, 1.0, 1.5, 2.0 and 3.0 mg/kg. . .
- DETD Assays of \*\*\*Proteinase\*\*\* Inhibitory Activity
- DETD [1008] A mixture containing a polypeptide of the present invention, the \*\*\*proteinase\*\*\* papain (0.015 units; Sigma-Aldrich, St. Louis, Mo.) and a citrate buffer solution (20 mM, pH=6.2, 1 ml) containing EDTA (0.88. . .
- CLM What is claimed is:
  - 18. A method of \*\*\*diagnosing\*\*\* a pathological condition or a susceptibility to a pathological condition in a subject comprising: (a) determining the presence or absence of a mutation in the polynucleotide of claim 1; and (b) \*\*\*diagnosing\*\*\* a pathological condition or a susceptibility to a pathological condition based on the presence or absence of said mutation.
  - 19. A method of \*\*\*diagnosing\*\*\* a pathological condition or a susceptibility to a pathological condition in a subject comprising: (a) determining the presence or amount of expression of the polypeptide of claim 11 in a biological sample; and (b) \*\*\*diagnosing\*\*\* a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the. . .

#### => d 15 bib ab 1-

YOU HAVE REQUESTED DATA FROM 81 ANSWERS - CONTINUE? Y/(N):y

- L5 ANSWER 1 OF 81 USPATFULL
- AN 2003:31119 USPATFULL
- TI Attractin-like polynucleotides, polypeptides, and antibodies
- IN Ni, Jian, Germantown, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Young, Paul E., Gaithersburg, MD, UNITED STATES
- PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)
- PI US 2003023070 A1 20030130
- AI US 2002-84994 A1 20020301 (10)
- RLI Continuation of Ser. No. US 2001-790621, filed on 23 Feb 2001, PENDING Continuation-in-part of Ser. No. WO 2000-US23663, filed on 29 Aug 2000, UNKNOWN
- PRAI US 1999-151348P 19990830 (60)
- DT Utility
- FS APPLICATION
- LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
- CLMN Number of Claims: 22
- ECL Exemplary Claim: 1

## DRWN No Drawings LN.CNT 12029

AB The present invention relates to novel human attractin-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human attractin-like polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human attractin-like polypeptides.

#### L5 ANSWER 2 OF 81 USPATFULL

AN 2003:30445 USPATFULL

TI Specimen collection container

IN Hudak, Robert Thomas, Carlsbad, CA, UNITED STATES

PI US 2003022392 A1 20030130

AI US 2001-915494 A1 20010725 (9)

DT Utility

FS APPLICATION

LREP DAVID R PRESTON & ASSOCIATES, 12625 HIGH BLUFF DRIVE, SUITE 205, SAN DIEGO, CA, 92130

CLMN Number of Claims: 59

ECL Exemplary Claim: 1

DRWN 4 Drawing Page(s)

LN.CNT 1705

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention recognizes that sample handling devices, particularly those used for testing for substances of abuse, do not allow for a separation of the bulk sample from a sample thereof to be tested. The present invention provides such a device and methods of use. The present invention includes but is not limited to a specimen collection device that includes a chamber such that the chamber is capable of collecting a specimen. The device also includes a reservoir such that the reservoir is capable of receiving a portion of the specimen from the chamber and optionally so that the reservoir is capable of receiving a test device. The device includes a valve functionally interposed between the chamber and the reservoir that is capable of transferring at least a portion of the specimen from the chamber to the reservoir such that the chamber and the reservoir are not in direct fluid communication. The device optionally includes a means for fluidic communication between the chamber, the valve and the reservoir.

#### L5 ANSWER 3 OF 81 USPATFULL

- AN 2003:30391 USPATFULL
- TI Kunitz-type protease inhibitor polynucleotides, polypeptides, and antibodies
- IN Ruben, Steven M., Olney, MD, UNITED STATES Ni, Jian, Germantown, MD, UNITED STATES
- PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)
- PI US 2003022338 A1 20030130
- AI US 2002-125522 A1 20020419 (10)
- RLI Continuation of Ser. No. US 2001-858718, filed on 17 May 2001, PENDING Continuation-in-part of Ser. No. WO 2000-US31917, filed on 21 Nov 2000, UNKNOWN

PRAI US 1999-166751P 19991122 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12021

AB The present invention relates to novel human KTPI polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human KTPI polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human KTPI polypeptides.

#### L5 ANSWER 4 OF 81 USPATFULL

AN 2003:17897 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2003013649 A1 20030116

AI US 2001-989442 A1 20011121 (9)

RLI Continuation of Ser. No. US 2001-764863, filed on 17 Jan 2001, ABANDONED

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 27547

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

## L5 ANSWER 5 OF 81 USPATFULL

AN 2003:13214 USPATFULL

- TI Methods and compositions for the identification and assessment of prostate cancer therapies and the \*\*\*diagnosis\*\*\* of prostate cancer
- IN Shyjan, Andrew W., Nahant, MA, United States
- PA Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)

PI US 6506607 B1 20030114 AI US 1998-220132 19981223 (9) PRAI US 1998-79303P 19980325 (60) US 1997-68821P 19971224 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Whisenant, Ethan C.; Assistant Examiner: Lu, Frank

LREP Fish & Richardson, PC CLMN Number of Claims: 4 ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 9448

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns two classes of differentially regulated genes: 1) genes that are more highly expressed in prostate cancer cells treated with testosterone than in untreated prostate cancer cells; and 2) genes that are more highly expressed in prostate cancer cells treated with bicalutamide, an anti-androgenic compound, than in untreated prostate cancer cells. Disclosed are methods for selecting and monitoring the effectiveness of therapeutic agents used for the treatment of prostate cancer. Also disclosed are methods for identifying novel therapeutic agents for the treatment of prostate cancer and methods and compositions for preventing, treating, and \*\*\*diagnosing\*\*\* prostate cancer.

#### L5 ANSWER 6 OF 81 USPATFULL

AN 2002:344413 USPATFULL

TI B7-like polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES Chen, Lieping, Rochester, MN, UNITED STATES Baker, Kevin P., Darnestown, MD, UNITED STATES Ni, Jian, Germantown, MD, UNITED STATES

PI US 2002198143 A1 20021226

AI US 2001-790622 A1 20010223 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US23792, filed on 30 Aug 2000, UNKNOWN

PRAI US 1999-152317P 19990903 (60)

US 2000-200346P 20000428 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 12424

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human B7-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human B7-like polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human B7-like polypeptides.

## L5 ANSWER 7 OF 81 USPATFULL

AN 2002:343975 USPATFULL

TI Serine protease polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2002197701 A1 20021226

AI US 2002-67761 A1 20020208 (10)

RLI Continuation of Ser. No. US 2001-804156, filed on 13 Mar 2001, PENDING

PRAI US 2000-189025P 20000314 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 13077

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human serine protease polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human serine protease polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human serine protease polypeptides.

## L5 ANSWER 8 OF 81 USPATFULL

AN 2002:337390 USPATFULL

TI Human polynucleotides, polypeptides, and antibodies

IN Moore, Paul A., Germantown, MD, UNITED STATES

Coleman, Timothy A., Gaithersburg, MD, UNITED STATES

Gentz, Reiner L., Rockville, MD, UNITED STATES

Dillon, Patrick J., Carlsbad, CA, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

Li, Yi, Sunnyvale, CA, UNITED STATES

Endress, Gregory A., Florence, MA, UNITED STATES

Soppet, Daniel R., Centreville, VA, UNITED STATES

PI US 2002192749 A1 20021219

AI US 2001-969384 A1 20011003 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US10542, filed on 2 Apr 2001,

UNKNOWN

PRAI US 2000-194118P 20000403 (60)

US 2000-236384P 20000929 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 13925

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human human polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells,

antibodies, and recombinant methods for producing human human polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human human polypeptides.

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L5 ANSWER 9 OF 81 USPATFULL
AN 2002:322538 USPATFULL
TI ADAM polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
   Ni, Jian, Germantown, MD, UNITED STATES
   Hastings, Gregg A., Westlake Village, CA, UNITED STATES
   Shi, Yanggu, Gaithersburg, MD, UNITED STATES
   Wei, Ping, Brookeville, MD, UNITED STATES
PI US 2002182702
                     A1 20021205
AI US 2001-955504 A1 20010919 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US14308, filed on 25 May 2000,
   UNKNOWN Continuation-in-part of Ser. No. US 2000-712907, filed on 16 Nov
   2000, PENDING
PRAI US 2000-234222P
                        20000921 (60)
   US 1999-136388P 19990527 (60)
   US
   US
   US 1999-136388P
                     19990527 (60)
   US 1999-142930P
                     19990709 (60)
   US 2000-178717P
                     20000128 (60)
DT Utility
     APPLICATION
FS
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 13921
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     The present invention relates to novel human ADAM polypeptides and
   isolated nucleic acids containing the coding regions of the genes
   encoding such polypeptides. Also provided are vectors, host cells,
   antibodies, and recombinant methods for producing human ADAM
   polypeptides. The invention further relates to ***diagnostic*** and
   therapeutic methods useful for ***diagnosing*** and treating
   disorders related to these novel human ADAM polypeptides.
L5 ANSWER 10 OF 81 USPATFULL
AN 2002:308509 USPATFULL
TI ADAM polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
   Ni, Jian, Germantown, MD, UNITED STATES
   Hastings, Gregg A., Westlake Village, CA, UNITED STATES
   Shi, Yanggu, Gaithersburg, MD, UNITED STATES
   Wei, Ping, Brookeville, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES (U.S.
   corporation)
PI US 2002173640
                     A1 20021121
AI US 2002-125452 A1 20020419 (10)
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RLI Continuation of Ser. No. US 2001-955504, filed on 19 Sep 2001, PENDING Continuation of Ser. No. US 2000-712907, filed on 16 Nov 2000, PENDING

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Continuation of Ser. No. WO 2000-US14308, filed on 25 May 2000, UNKNOWN
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PRAI US 2000-234222P 20000921 (60)

US 1999-136388P 19990527 (60)

US 1999-142930P 19990709 (60)

US 2000-178717P 20000128 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 4 Drawing Page(s)

LN.CNT 13925

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human ADAM polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human ADAM polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human ADAM polypeptides.

#### L5 ANSWER 11 OF 81 USPATFULL

AN 2002:308333 USPATFULL

TI Protein tyrosine kinase receptor polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Young, Paul E., Gaithersburg, MD, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

PI US 2002173458 A1 20021121

AI US 2001-836392 A1 20010418 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US28066, filed on 12 Oct 2000, UNKNOWN

PRAI US 1999-159542P 19991015 (60)

US 1999-165914P 19991117 (60)

US 2000-189027P 20000314 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 13395

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human PTK polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human PTK polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human PTK polypeptides.

## L5 ANSWER 12 OF 81 USPATFULL

AN 2002:308329 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

A1 20021121 PI US 2002173454

AI US 2001-764904 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 21956

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel reproductive system related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "reproductive system related antigens," and the use of such reproductive system related antigens for detecting disorders of the reproductive system, particularly the presence of cancers and cancer metastases. More specifically, isolated reproductive system associated nucleic acid molecules are provided encoding novel reproductive system associated polypeptides. Novel reproductive system related polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human reproductive system associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* , treating, preventing and/or prognosing disorders related to the reproductive system, including reproductive system cancers, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

L5 ANSWER 13 OF 81 USPATFULL

AN 2002:301173 USPATFULL

TI Human prostate specific G-protein receptor HPRAJ70

IN Soppet, Daniel R., Centreville, VA, UNITED STATES Li, Yi, Sunnyvale, CA, UNITED STATES Rosen, Craig A., Laytonsville, CA, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002168717 A1 20021114

AI US 2001-968033 A1 20011002 (9)

RLI Continuation-in-part of Ser. No. US 1999-339115, filed on 24 Jun 1999, GRANTED, Pat. No. US 6372891 Division of Ser. No. US 1998-53303, filed on 1 Apr 1998, GRANTED, Pat. No. US 5948890 Division of Ser. No. US 1995-465980, filed on 6 Jun 1995, GRANTED, Pat. No. US 5756309

PRAI US 2000-237275P 20001003 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 29 ECL Exemplary Claim: 1

DRWN 6 Drawing Page(s)

#### LN.CNT 10369

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to PSGR, a novel prostate specific gene with homology to a G-protein coupled receptor overexpressed in prostate cancer. More specifically, the invention relates to PSGR polynucleotides and the polypeptides encoded by these polynucleotides, and the use of PSGR polynucleotides and polypeptides for detecting disorders of the reproductive system, including disorders of the prostate, particularly the presence of cancer. This invention relates to PSGR polynucleotides and polypeptides as well as vectors, host cells, antibodies directed to PSGR polynucleotides and polypeptides and recombinant and synthetic methods for producing the same. Also provided are methods for \*\*\*diagnosing\*\*\*, treating, preventing, and/or prognosing disorders related to the prostate, including cancer. The invention further relates to screening methods for identifying agonists and antagonists of PSGR polynucleotides and polypeptides of the invention and methods and/or compositions for inhibiting or enhancing the production and/or function of the PSGR polypeptides of the present invention.

#### L5 ANSWER 14 OF 81 USPATFULL

AN 2002:301167 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002168711 A1 20021114

AI US 2001-764868 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 31967

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*
, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

#### L5 ANSWER 15 OF 81 USPATFULL

- AN 2002:297432 USPATFULL
- TI Non-stochastic generation of genetic vaccines
- IN Short, Jay M., Rancho Santa Fe, CA, United States
- PA Diversa Corporation, San Diego, CA, United States (U.S. corporation)

PI US 6479258 B1 20021112

AI US 2000-495052 20000131 (9)

RLI Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, now patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation-in-part of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696

PRAI US 1995-8311P 19951207 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Park, Hankyel T.

LREP Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.

CLMN Number of Claims: 86

ECL Exemplary Claim: 1

DRWN 66 Drawing Figure(s); 61 Drawing Page(s)

LN.CNT 19213

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods of obtaining vaccines by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-satuaration mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, vectors can be obtained which exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like.

## L5 ANSWER 16 OF 81 USPATFULL

AN 2002:295334 USPATFULL

TI Steroid hormone receptor polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2002165384 A1 20021107

AI US 2002-103511 A1 20020322 (10)

RLI Continuation of Ser. No. US 2001-805204, filed on 14 Mar 2001, PENDING Continuation-in-part of Ser. No. WO 2000-US24517, filed on 7 Sep 2000, UNKNOWN

PRAI US 2000-189032P 20000314 (60)

US 1999-152932P 19990909 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11571

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human steroid hormone receptor polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human steroid

hormone receptor polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*
and treating disorders related to these novel human steroid hormone
receptor polypeptides.

L5 ANSWER 17 OF 81 USPATFULL

AN 2002:295092 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES
Barash, Steven C., Rockville, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2002165137 A1 20021107

AI US 2001-860670 A1 20010521 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US1346, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764859, filed on 17 Jan 2001, PENDING

PRAI US 2000-205515P 20000519 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 20253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

## L5 ANSWER 18 OF 81 USPATFULL

AN 2002:294650 USPATFULL

TI TM4SF receptor polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, 20850 (U.S. corporation)

PI US 2002164693 A1 20021107

AI US 2001-972970 A1 20011010 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US11130, filed on 5 Apr 2001, UNKNOWN

PRAI US 2000-195336P 20000410 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11940

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human TM4SF polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human TM4SF polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human TM4SF polypeptides.

#### L5 ANSWER 19 OF 81 USPATFULL

AN 2002:294649 USPATFULL

TI Immune system-related polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES

Hilbert, David, Bethesda, MD, UNITED STATES

Kenny, Joseph J., Damascus, MD, UNITED STATES

Moore, Paul A., Germantown, MD, UNITED STATES

Choi, Gil H., Rockville, MD, UNITED STATES

Soppet, Daniel R., Centreville, VA, UNITED STATES

Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Gruber, Joachim R., Dallas, TX, UNITED STATES

Endress, Gregory A., Florence, MA, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002164692 A1 20021107

AI US 2001-949842 A1 20010912 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US7260, filed on 7 Mar 2001,

UNKNOWN

PRAI US 2000-187873P 20000308 (60)

US 2000-224367P 20000811 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 13952

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human immune system-related polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human immune system-related polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human immune system-related polypeptides.

### L5 ANSWER 20 OF 81 USPATFULL

- AN 2002:294642 USPATFULL
- TI Nucleic acids, proteins, and antibodies
- IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002164685 A1 20021107

AI US 2001-764857 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 16891

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

## L5 ANSWER 21 OF 81 USPATFULL

AN 2002:288336 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002161208 A1 20021031

AI US 2001-764884 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1 DRWN No Drawings

LN.CNT 18396

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production

and function of the polypeptides of the present invention.

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L5 ANSWER 22 OF 81 USPATFULL
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AN 2002:287630 USPATFULL

TI Serine/threonine phosphatase polynucleotides, polypeptides, and antibodies

IN Ebner, Reinhard, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002160493 A1 20021031

AI US 2001-941831 A1 20010830 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US6256, filed on 28 Feb 2001, UNKNOWN

PRAI US 2000-186350P 20000302 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 14729

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human PSPase polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human PSPase polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human PSPase polypeptides.

#### L5 ANSWER 23 OF 81 USPATFULL

AN 2002:287628 USPATFULL

TI Human Serpin polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PI US 2002160491 A1 20021031

AI US 2001-912628 A1 20010726 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US5082, filed on 29 Feb 2000, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US2484, filed on 26 Jan 2001, UNKNOWN

PRAI US 2000-178769P 20000128 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12380

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human Serpin polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human Serpin polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating

disorders related to these novel human Serpin polypeptides.

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L5 ANSWER 24 OF 81 USPATFULL
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AN 2002:280103 USPATFULL

TI Calcium channel polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)

PI US 2002155539 A1 20021024

AI US 2002-50786 A1 20020118 (10)

RLI Continuation of Ser. No. US 2001-774028, filed on 31 Jan 2001, PENDING

Continuation-in-part of Ser. No. WO 2000-US20392, filed on 27 Jul 2000,

**UNKNOWN** 

PRAI US 1999-145958P 19990728 (60)

US 1999-149446P 19990818 (60)

US 2000-189064P 20000314 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11310

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human calcium channel polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human calcium channel polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human calcium channel polypeptides.

#### L5 ANSWER 25 OF 81 USPATFULL

AN 2002:273550 USPATFULL

TI Nucleic acids, proteins and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002151681 A1 20021017

AI US 2001-925300 A1 20010810 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US5988, filed on 8 Mar 2000,

UNKNOWN

PRAI US 1999-124270P 19990312 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 29771

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to newly identified prostate or prostate cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "prostate cancer

antigens," and to the complete gene sequences associated therewith and to the expression products thereof, and to antibodies that immunospecifically bind these polypeptides, as well as the use of such prostate cancer polynucleotides, antigens, and antibodies for \*\*\*detection\*\*\* , prevention, prognosis, and treatment of disorders of the reproductive system, particularly disorders of the prostate, including, but not limited to, the presence of prostate cancer and prostate cancer metastases. More specifically, isolated prostate cancer nucleic acid molecules are provided encoding novel prostate cancer polypeptides. Novel prostate cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human prostate cancer polynucleotides, polypeptides, and/or antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the prostate, including prostate cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

#### L5 ANSWER 26 OF 81 USPATFULL

AN 2002:273351 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002151479 A1 20021017

AI US 2001-764873 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 17167

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

AN 2002:272888 USPATFULL

TI Human polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2002151009 A1 20021017

AI US 2001-939825 A1 20010828 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US5498, filed on 22 Feb 2001,

**UNKNOWN** 

PRAI US 2000-184664P 20000224 (60)

US 2000-189874P 20000316 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 14831

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human polypeptides.

### L5 ANSWER 28 OF 81 USPATFULL

AN 2002:266261 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002147140 A1 20021010

AI US 2001-764877 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 33677

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel musculoskeletal system related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "musculoskeletal system antigens," and the use of such musculoskeletal system antigens for detecting disorders of the musculoskeletal system, particularly the presence of cancer and cancer metastases. More specifically, isolated musculoskeletal system associated nucleic acid molecules are provided encoding novel musculoskeletal system associated polypeptides. Novel musculoskeletal

system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human musculoskeletal system associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the musculoskeletal system, including cancer of musculoskeletal tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

#### L5 ANSWER 29 OF 81 USPATFULL

AN 2002:243562 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATESRuben, Steven M., Olney, MD, UNITED STATESBarash, Steven C., Rockville, MD, UNITED STATES

PI US 2002132753 A1 20020919

AI US 2001-764864 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 37784

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

# L5 ANSWER 30 OF 81 USPATFULL

AN 2002:221965 USPATFULL

TI Steroid hormone receptor polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002120110 A1 20020829

AI US 2001-805204 A1 20010314 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US24517, filed on 7 Sep 2000, UNKNOWN

PRAI US 2000-189032P 20000314 (60)

Utility DT

FS **APPLICATION** 

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11573

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human steroid hormone receptor polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human steroid hormone receptor polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human steroid hormone receptor polypeptides.

L5 ANSWER 31 OF 81 USPATFULL

AN 2002:221777 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002119919 A1 20020829

AI US 2001-764855 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 19514

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel colorectal cancer related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "colorectal cancer antigens," and the use of such colorectal cancer antigens for detecting disorders of the colon and/or rectum, particularly the presence of colorectal cancer and colorectal cancer metastases. More specifically, isolated colorectal cancer associated nucleic acid molecules are provided encoding novel colorectal cancer associated polypeptides. Novel colorectal cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human colorectal cancer associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* , treating, preventing and/or prognosing disorders related to the colon and/or rectum, including colorectal cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to

methods and/or compositions for inhibiting the production and function

of the polypeptides of the present invention.

L5 ANSWER 32 OF 81 USPATFULL

AN 2002:221379 USPATFULL

TI Trefoil domain-containing polynucleotides, polypeptides, and antibodies

IN Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002119519 A1 20020829

AI US 2001-891171 A1 20010626 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US34920, filed on 22 Dec 2000, UNKNOWN

PRAI US 1999-171618P 19991223 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12171

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human TDC polypeptides and isolated nucliec acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human TDC olypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human TDC polypeptides.

### L5 ANSWER 33 OF 81 USPATFULL

AN 2002:206770 USPATFULL

TI Compositions and methods for \*\*\*diagnosing\*\*\* and treating conditions, disorders, or diseases involving cell death

IN Lo, Donald C., Chapel Hill, NC, UNITED STATES

Barney, Shawn, Apex, NC, UNITED STATES

Thomas, Mary Beth, Chapel Hill, NC, UNITED STATES

Portbury, Stuart D., Durham, NC, UNITED STATES

Puranam, Kasturi, Durham, NC, UNITED STATES

Katz, Lawrence C., Durham, NC, UNITED STATES

PA COGENT NEUROSCIENCE, INC., DURHAM, NC, UNITED STATES, 27704 (U.S. corporation)

PI US 2002111471 A1 20020815

AI US 2001-922261 A1 20010803 (9)

RLI Division of Ser. No. US 1999-461697, filed on 14 Dec 1999, PATENTED

DT Utility

FS APPLICATION

LREP PENNIE & EDMONDS LLP, 1155 Avenue of the Americas, New York, NY, 10036-2711

CLMN Number of Claims: 55

ECL Exemplary Claim: 1

DRWN 92 Drawing Page(s)

LN.CNT 8075

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods for the treatment and \*\*\*diagnosis\*\*\* of conditions, disorders, or diseases involving cell death. The invention encompasses protective nucleic acids which, when introduced into a cell predisposed to undergo cell death or

in the process of undergoing cell death, prevent, delay, or rescue the cell from death relative to a corresponding cell into which no exogenous nucleic acids have been introduced. The invention encompasses nucleic acids of the protective sequence, host cell expression systems of the protective sequence, and hosts that have been transformed by these expression systems, including transgenic animals. The invention also encompasses novel protective sequence products, including proteins, polypeptides and peptides containing amino acid sequences of the proteins, fusion proteins of proteins, polypeptides and peptides, and antibodies directed against such gene products. The invention further relates to target sequences, including upstream and downstream regulatory sequences or complete gene sequences, antibodies, antisense molecules or sequences, ribozyme molecules, and other inhibitors or modulators directed against such protective sequences, protective sequence products, genes, gene products, and/or their regulatory elements involved in cell death. The present invention also relates to methods and compositions for the \*\*\*diagnosis\*\*\* and treatment of conditions, disorders, or diseases, involving cell death, including, but not limited to, treatment of the types of conditions, disorders, or diseases, which can be prevented, delayed or rescued from cell death and include, but are not limited to, those associated with the central nervous system, including neurological and psychiatric conditions, disorders, or diseases, and those of the peripheral nervous system. Further, the invention relates to methods of using the protective sequence, protective sequence products, and/or their regulatory elements for the identification of compounds that modulate the expression of the protective sequence and/or the activity of the protective sequence product. Such compounds can be useful as therapeutic agents in the treatment of various conditions, disorders, or diseases involving cell death.

## L5 ANSWER 34 OF 81 USPATFULL

AN 2002:198680 USPATFULL

TI Extracellular matrix polynucleotides, polypeptides, and antibodies

IN Fiscella, Michele, Bethesda, MD, UNITED STATES Ebner, Reinhard, Gaithersburg, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002106780 A1 20020808

AI US 2001-978249 A1 20011017 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US11643, filed on 11 Apr 2001, UNKNOWN

PRAI US 2000-198123P 20000418 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 13488

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human extracellular matrix polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human

extracellular matrix polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*
and treating disorders related to these novel human extracellular matrix
polypeptides.

L5 ANSWER 35 OF 81 USPATFULL

AN 2002:198631 USPATFULL

TI Bcl-2-like polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES
Duan, D. Roxanne, Bethesda, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES

PI US 2002106731 A1 20020808

AI US 2001-912599 A1 20010726 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US3080, filed on 31 Jan 2001,

UNKNOWN

PRAI US 2000-179487P 20000201 (60)

US 2000-180697P 20000207 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12354

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human Bcl-2-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human Bcl-2-like polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human Bcl-2-like polypeptides.

L5 ANSWER 36 OF 81 USPATFULL

AN 2002:191573 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002102638 A1 20020801

AI US 2001-764846 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 22814

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides

and/or polypeptides, and antibodies. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*

, treating, preventing and/or prognosing disorders related to these
novel polypeptides. The invention further relates to screening methods
for identifying agonists and antagonists of polynucleotides and
polypeptides of the invention. The present invention further relates to
methods and/or compositions for inhibiting or enhancing the production
and function of the polypeptides of the present invention.

### L5 ANSWER 37 OF 81 USPATFULL

AN 2002:179165 USPATFULL

TI Plasminogen-like polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES Young, Paul E., Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002094955 A1 20020718

AI US 2001-832197 A1 20010411 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US27253, filed on 4 Oct 2000, UNKNOWN

PRAI US 1999-158044P 19991007 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22 ECL Exemplary Claim: 1 DRWN No Drawings

LN.CNT 11038

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human plasminogen-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human plasminogen-like polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human plasminogen-like polypeptides.

## L5 ANSWER 38 OF 81 USPATFULL

AN 2002:179163 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002094953 A1 20020718

AI US 2001-764860 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 21647

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel respiratory system related

polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "respiratory system antigens," and the use of such respiratory system antigens for detecting disorders of the respiratory system, particularly the presence of cancer of respiratory system tissues and cancer metastases. More specifically, isolated respiratory system associated nucleic acid molecules are provided encoding novel respiratory system associated polypeptides. Novel respiratory system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human respiratory system associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* , treating, preventing and/or prognosing disorders related to the respiratory system, including cancer of respiratory system tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

#### L5 ANSWER 39 OF 81 USPATFULL

- AN 2002:171946 USPATFULL
- TI Kunitz-type protease inhibitor polynucleotides, polypeptides, and antibodies
- IN Ruben, Steven M., Olney, MD, UNITED STATES Ni, Jian, Germantown, MD, UNITED STATES
- PI US 2002090695 A1 20020711
- AI US 2001-858718 A1 20010517 (9)
- RLI Continuation-in-part of Ser. No. WO 2000-US31917, filed on 21 Nov 2000, UNKNOWN

PRAI US 1999-166751P 19991122 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12006

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human KTPI polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human KTPI polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human KTPI polypeptides.

- L5 ANSWER 40 OF 81 USPATFULL
- AN 2002:171925 USPATFULL
- TI Nucleic acids, proteins, and antibodies
- IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES
- PI US 2002090674 A1 20020711

AI US 2001-764903 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 21376

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel respiratory system related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "respiratory system antigens," and the use of such respiratory system antigens for detecting disorders of the respiratory system, particularly the presence of cancer of respiratory system tissues and cancer metastases. More specifically, isolated respiratory system associated nucleic acid molecules are provided encoding novel respiratory system associated polypeptides. Novel respiratory system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human respiratory system associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* , treating, preventing and/or prognosing disorders related to the respiratory system, including cancer of respiratory system tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

# L5 ANSWER 41 OF 81 USPATFULL

AN 2002:171924 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002090673 A1 20020711

AI US 2001-764898 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 25258

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

#### L5 ANSWER 42 OF 81 USPATFULL

AN 2002:171923 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002090672 A1 20020711

AI US 2001-764853 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1 DRWN No Drawings

LN.CNT 35378

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

### L5 ANSWER 43 OF 81 USPATFULL

AN 2002:171866 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002090615 A1 20020711

AI US 2001-764878 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 19407

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel lung related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "lung antigens," and the use of such lung antigens for detecting disorders of the lung, particularly the presence of lung cancer and lung cancer metastases. More specifically, isolated lung associated nucleic acid molecules are provided encoding novel lung associated polypeptides. Novel lung polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human lung associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the lung, including lung cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

L5 ANSWER 44 OF 81 USPATFULL

AN 2002:165194 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002086823 A1 20020704

AI US 2001-764889 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 17471

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel respiratory system related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "respiratory system antigens," and the use of such respiratory system antigens for detecting disorders of the respiratory system, particularly the presence of cancer of respiratory system tissues and cancer metastases. More specifically, isolated respiratory system associated nucleic acid molecules are provided encoding novel respiratory system associated polypeptides. Novel respiratory system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human respiratory system associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the respiratory system, including cancer of respiratory system tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention.

The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

### L5 ANSWER 45 OF 81 USPATFULL

AN 2002:165193 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002086822 A1 20020704

AI US 2001-764886 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 20931

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

### L5 ANSWER 46 OF 81 USPATFULL

AN 2002:165192 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002086821 A1 20020704

AI US 2001-764881 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 27531

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel respiratory system related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "respiratory system antigens," and the use

of such respiratory system antigens for detecting disorders of the respiratory system, particularly the presence of cancer of respiratory system tissues and cancer metastases. More specifically, isolated respiratory system associated nucleic acid molecules are provided encoding novel respiratory system associated polypeptides. Novel respiratory system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human respiratory system associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the respiratory system, including cancer of respiratory system tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

L5 ANSWER 47 OF 81 USPATFULL

AN 2002:165191 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002086820 A1 20020704

AI US 2001-764862 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 17727

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel respiratory system related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "respiratory system antigens," and the use of such respiratory system antigens for detecting disorders of the respiratory system, particularly the presence of cancer of respiratory system tissues and cancer metastases. More specifically, isolated respiratory system associated nucleic acid molecules are provided encoding novel respiratory system associated polypeptides. Novel respiratory system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human respiratory system associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the respiratory system, including cancer of respiratory system tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for

inhibiting the production and function of the polypeptides of the present invention.

# L5 ANSWER 48 OF 81 USPATFULL

AN 2002:165182 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002086811 A1 20020704

Aĭ US 2001-764861 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 22023

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

#### L5 ANSWER 49 OF 81 USPATFULL

AN 2002:164735 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002086353 A1 20020704

AI US 2001-764856 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 23314

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and

recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

L5 ANSWER 50 OF 81 USPATFULL

AN 2002:164712 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002086330 A1 20020704

AI US 2001-764893 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 25862

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

B The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

L5 ANSWER 51 OF 81 USPATFULL

AN 2002:157060 USPATFULL

TI Nucleic acids, proteins and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002081659 A1 20020627

AI US 2001-925297 A1 20010810 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US5989, filed on 8 Mar 2000, UNKNOWN

PRAI US 1999-124270P 19990312 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 20326

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel pancreatic related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "pancreatic antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such pancreatic polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the pancreas, including, but not limited to, the presence of pancreatic cancer and pancreatic cancer metastases. More specifically, isolated pancreatic nucleic acid molecules are provided encoding novel pancreatic polypeptides. Novel pancreatic polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human pancreatic polynucleotides, polypeptides, and/or antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the pancreas, including pancreatic cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

#### L5 ANSWER 52 OF 81 USPATFULL

AN 2002:157008 USPATFULL

TI Four disulfide core domain-containing (FDCD) polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PI US 2002081607 A1 20020627

AI US 2001-874062 A1 20010606 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US32462, filed on 29 Nov 2000, UNKNOWN

PRAI US 1999-168229P 19991201 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850 CLMN Number of Claims: 22

ECL Exemplary Claim: 1 DRWN No Drawings

LN.CNT 11572

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human FDCD polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human FDCD polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human FDCD polypeptides.

### L5 ANSWER 53 OF 81 USPATFULL

AN 2002:149306 USPATFULL

TI ADAM polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002077465 A1 20020620

AI US 2001-945676 A1 20010905 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US5497, filed on 22 Feb 2001, UNKNOWN

PRAI US 2000-187937P 20000303 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12287

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human ADAM polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human ADAM polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human ADAM polypeptides.

## L5 ANSWER 54 OF 81 USPATFULL

AN 2002:149299 USPATFULL

TI Death domain-containing receptor polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002077458 A1 20020620

AI US 2001-835788 A1 20010417 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US28666, filed on 17 Oct 2000, UNKNOWN

PRAI US 1999-159585P 19991018 (60)

US 1999-167246P 19991124 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings LN.CNT 14143

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human DDCR polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human DDCR polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human DDCR polypeptides.

#### L5 ANSWER 55 OF 81 USPATFULL

AN 2002:149114 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002077270 A1 20020620

AI US 2001-764848 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 20057

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

## L5 ANSWER 56 OF 81 USPATFULL

AN 2002:141609 USPATFULL

TI Transferrin polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PI US 2002072596 A1 20020613

AI US 2001-891126 A1 20010626 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US34769, filed on 21 Dec 2000, UNKNOWN

PRAI US 1999-171595P 19991223 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 12048

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human transferrin polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human transferrin polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human transferrin polypeptides.

#### L5 ANSWER 57 OF 81 USPATFULL

AN 2002:133469 USPATFULL

TI Serine protease polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Ni, Jian, Germantown, MD, UNITED STATES

PI US 2002068320 A1 20020606

AI US 2001-804156 A1 20010313 (9)

PRAI US 2000-189025P 20000314 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 13119

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human serine protease polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human serine protease polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human serine protease polypeptides.

### L5 ANSWER 58 OF 81 USPATFULL

AN 2002:126703 USPATFULL

TI Immunoglobulin superfamily polynucleotides, polypeptides, and antibodies

IN Young, Paul E., Gaithersburg, MD, UNITED STATES

Ni, Jain, Rockville, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PI US 2002065220 A1 20020530

AI US 2001-799514 A1 20010307 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US23662, filed on 29 Aug 2000, UNKNOWN

PRAI US 1999-152248P 19990903 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 12437

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human Ig-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human Ig-like polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human Ig-like polypeptides.

#### L5 ANSWER 59 OF 81 USPATFULL

AN 2002:126332 USPATFULL

TI Human protein tyrosine phosphatase polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002064844 A1 20020530

AI US 2001-906779 A1 20010718 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US1563, filed on 17 Jan 2001, UNKNOWN

PRAI US 2000-176306P 20000118 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12129

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human PTPase polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human PTPase polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human PTPase polypeptides.

#### L5 ANSWER 60 OF 81 USPATFULL

AN 2002:126317 USPATFULL

TI Human tumor necrosis factor delta and epsilon

IN Yu, Guo-Liang, Berkeley, CA, UNITED STATES Ni, Jian, Germantown, MD, UNITED STATES

Gentz, Reiner L., Rockville, MD, UNITED STATES

Dillon, Patrick J., Carlsbad, CA, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2002064829 A1 20020530

AI US 2001-879919 A1 20010614 (9)

RLI Continuation-in-part of Ser. No. US 1997-815783, filed on 12 Mar 1997, PENDING

PRAI US 1996-16812P 19960314 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 62 ECL Exemplary Claim: 1

DRWN 11 Drawing Page(s)

LN.CNT 13531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to human TNF delta and TNF epsilon polypeptides, polynucleotides encoding the polypeptides, methods for producing the polypeptides, in particular by expressing the polynucleotides, and agonists and antagonists of the polypeptides. The invention further relates to methods for utilizing such polynucleotides, polypeptides, agonists and antagonists for applications, which relate, in part, to research, \*\*\*diagnostic\*\*\* and clinical arts.

### L5 ANSWER 61 OF 81 USPATFULL

AN 2002:126314 USPATFULL

TI Cytokine receptor-like polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

Young, Paul E., Gaithersburg, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PI US 2002064826 A1 20020530

AI US 2001-874069 A1 20010606 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US32525, filed on 30 Nov 2000,

UNKNOWN

PRAI US 1999-168621P 19991203 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12089

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human cytokine receptor-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human cytokine receptor-like polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human cytokine receptor-like polypeptides.

#### L5 ANSWER 62 OF 81 USPATFULL

AN 2002:119538 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002061521 A1 20020523

AI US 2001-764869 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 27967

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel cardiovascular system related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "cardiovascular system antigens," and the use of such cardiovascular system antigens for detecting disorders of the cardiovascular system, particularly the presence of cancer of cardiovascular system tissues and cancer metastases. More specifically, isolated cardiovascular system associated nucleic acid molecules are provided encoding novel cardiovascular system associated polypeptides. Novel cardiovascular system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human cardiovascular system associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the cardiovascular system, including cancer of cardiovascular system tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

### L5 ANSWER 63 OF 81 USPATFULL

AN 2002:116000 USPATFULL

TI Electrochemical \*\*\*detection\*\*\* of nucleic acid sequences

IN Henkens, Robert W., Beaufort, NC, United States

O'Daly, John P., Carrboro, NC, United States

Wojciechowski, Marek, Cary, NC, United States

Zhang, Honghua, San Diego, CA, United States

Naser, Naiih, Orlando, FL, United States

Roe, R. Michael, Apex, NC, United States

Stewart, Thomas N., Durham, NC, United States

Thompson, Deborah M., Raleigh, NC, United States

Sundseth, Rebecca, Durham, NC, United States

Wegner, Steven E., Chapel Hill, NC, United States

PA Andcare, Inc., Durham, NC, United States (U.S. corporation)

PI US 6391558 B1 20020521

AI US 2000-549853 20000414 (9)

RLI Continuation-in-part of Ser. No. US 1998-44206, filed on 17 Mar 1998, now abandoned

PRAI US 1997-40949P 19970318 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Riley, Jezia

LREP Akerman Senterfitt
CLMN Number of Claims: 27
ECL Exemplary Claim: 1

DRWN 22 Drawing Figure(s); 20 Drawing Page(s)

LN.CNT 4484

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An electrochemical \*\*\*detection\*\*\* system which specifically detects selected nucleic acid segments is described. The system utilizes biological probes such as nucleic acid or peptide nucleic acid probes which are complementary to and specifically hybridize with selected nucleic acid segments in order to generate a measurable current when an amperometric potential is applied. The electrochemical signal can be quantified.

#### L5 ANSWER 64 OF 81 USPATFULL

AN 2002:106416 USPATFULL

TI Nucleic acids, proteins and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002055627 A1 20020509

AI US 2001-925299 A1 20010810 (9)

RLI Continuation of Ser. No. WO 2000-US5883, filed on 8 Mar 2000, UNKNOWN

PRAI US 1999-124270P 19990312 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 20658

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel colorectal cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "colorectal cancer antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such colorectal cancer polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the colon and/or rectum, including, but not limited to, the presence of colorectal cancer and colorectal cancer metastases. More specifically, isolated colorectal cancer nucleic acid molecules are provided encoding novel colorectal cancer polypeptides. Novel colorectal cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human colorectal cancer polynucleotides, polypeptides, and/or antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the colon and/or rectum, including colorectal cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

## L5 ANSWER 65 OF 81 USPATFULL

AN 2002:105937 USPATFULL

TI Major intrinsic protein (MIP)-like polynucleotides, polypeptides, and antibodies

IN Ruben, Steven A., Olney, MD, UNITED STATES Ni, Jian, Germantown, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)

PI US 2002055142 A1 20020509

AI US 2001-862419 A1 20010523 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US31919, filed on 21 Nov 2000,

UNKNOWN

PRAI US 1999-167247P 19991124 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11747

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human MIP-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human MIP-like polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human MIP-like polypeptides.

#### L5 ANSWER 66 OF 81 USPATFULL

AN 2002:99407 USPATFULL

TI Nucleic acids, proteins and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002052308 A1 20020502

AI US 2001-925301 A1 20010810 (9)

RLI Continuation of Ser. No. WO 2000-US5882, filed on 8 Mar 2000, UNKNOWN

PRAI US 1999-124270P 19990312 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 30577

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to newly identified tissue specific cancer associated polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "cancer antigens," and to the complete gene sequences associated therewith and to the expression products thereof, as well as the use of such tissue specific cancer antigens for \*\*\*detection\*\*\*, prevention and treatment of tissue specific disorders, particularly the presense of cancer. This invention relates to the cancer antigens as well as vectors, host cells, antibodies directed to cancer antigens and recombinant and synthetic methods for producing the same. Also provided are \*\*\*diagnostic\*\*\* methods for \*\*\*diagnosing\*\*\* and treating, preventing and/or prognosing tissue specific disorders, including cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of cancer antigens of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and/or function of the polypeptides of the present invention.

L5 ANSWER 67 OF 81 USPATFULL

AN 2002:99088 USPATFULL

TI Kringle domain-containing polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES Moore, Paul A., Germantown, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002051984 A1 20020502

AI US 2001-848288 A1 20010504 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US30664, filed on 8 Nov 2000, UNKNOWN

PRAI US 1999-164853P 19991112 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12041

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human KDC polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human KDC polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human KDC polypeptides.

### L5 ANSWER 68 OF 81 USPATFULL

- AN 2002:85190 USPATFULL
- TI Nucleic acids, proteins, and antibodies
- IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Rubin, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES
- PI US 2002045230 A1 20020418
- AI US 2001-908711 A1 20010720 (9)
- RLI Continuation-in-part of Ser. No. WO 2001-US1360, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764867, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1344, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764892, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1345, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764888, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1329, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764905, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764891, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1339, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764869, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1340, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764874, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1334, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764898, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1320, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764853, filed on

17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764902, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1239, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764870, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1348, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764882, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1347, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764896, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1307, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764864, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1341, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764856, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1336, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764868, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1312, filed on 17 Jan 2001, UNKNOWN

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 24462

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel ovarian related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "ovarian antigens," and the use of such ovarian antigens for detecting disorders of the ovaries and/or breast, particularly the presence of ovarian and/or breast cancer and ovarian and/or breast cancer metastases. More specifically, isolated ovarian associated nucleic acid molecules are provided encoding novel ovarian associated polypeptides. Novel ovarian polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the ovaries and/or breast, including ovarian and/or breast cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

L5 ANSWER 69 OF 81 USPATFULL

AN 2002:84902 USPATFULL

TI Nucleic acids, proteins and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002044941 A1 20020418

AI US 2001-925302 A1 20010810 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US5918, filed on 8 Mar 2000,

UNKNOWN

PRAI US 1999-124270P 19990312 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 21121

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel lung cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "lung cancer antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such lung cancer polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the lung, including, but not limited to, the presence of lung cancer and lung cancer metastases. More specifically, isolated lung cancer nucleic acid molecules are provided encoding novel lung cancer polypeptides. Novel lung cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human lung cancer polynucleotides, polypeptides, and/or antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* , treating, preventing and/or prognosing disorders related to the lung, including lung cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

## L5 ANSWER 70 OF 81 USPATFULL

AN 2002:78729 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002042386 A1 20020411

AI US 2001-764870 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

LN.CNT 23133

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1 DRWN No Drawings

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

### L5 ANSWER 71 OF 81 USPATFULL

AN 2002:78442 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002042096 A1 20020411

AI US 2001-764887 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1 DRWN No Drawings

LN.CNT 19583

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel liver related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "liver antigens," and the use of such liver antigens for detecting disorders of the liver, particularly the presence of cancer of liver and cancer metastases. More specifically, isolated liver associated nucleic acid molecules are provided encoding novel liver associated polypeptides. Novel liver polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human liver associated polynucleotides and/or polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* , treating, preventing and/or prognosing disorders related to the liver, including cancer of liver tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

### L5 ANSWER 72 OF 81 USPATFULL

AN 2002:72627 USPATFULL

TI Nucleic, acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002039764 A1 20020404

AI US 2001-925298 A1 20010810 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US5881, filed on 8 Mar 2000, UNKNOWN

PRAI US 1999-124270P 19990312 (60)

DT Utility

#### FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 20087

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel ovarian cancer and/or breast cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "ovarian and/or breast antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such ovarian and/or breast polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the reproductive system, particularly disorders of the ovaries and/or breast, including, but not limited to, the presence of ovarian and/or breast cancer and ovarian and/or breast cancer metastases. More specifically, isolated ovarian and/or breast nucleic acid molecules are provided encoding novel ovarian and/or breast polypeptides. Novel ovarian and/or breast polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian and/or breast polynucleotides, polypeptides, and/or antibodies. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\*, treating, preventing and/or prognosing disorders related to the ovaries and/or breast, including ovarian and/or breast cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

# L5 ANSWER 73 OF 81 USPATFULL

AN 2002:66896 USPATFULL

TI ABC transport polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES

PI US 2002037549 A1 20020328

AI US 2001-767870 A1 20010124 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US19736, filed on 20 Jul 2000, UNKNOWN

PRAI US 1999-145215P 19990723 (60)

US 1999-149445P 19990818 (60)

US 1999-164730P 19991112 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12219

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human ABC transport polypeptides and isolated nucleic acids containing the coding regions of the genes

encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human ABC transport polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human ABC transport polypeptides.

L5 ANSWER 74 OF 81 USPATFULL

AN 2002:66870 USPATFULL

TI IL-6-like polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PI US 2002037523 A1 20020328

AI US 2001-875016 A1 20010607 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US33134, filed on 7 Dec 2000, UNKNOWN

PRAI US 1999-169838P 19991209 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11587

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human IL-6-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human IL-6-like polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human IL-6-like polypeptides.

## L5 ANSWER 75 OF 81 USPATFULL

AN 2002:61226 USPATFULL

TI COMPOSITIONS AND METHODS FOR TREATING INFECTIONS USING CATIONIC PEPTIDES ALONE OR IN COMBINATION WITH ANTIBIOTICS

IN KRIEGER, TIMOTHY J., RICHMOND, CANADA

TAYLOR, ROBERT, SURREY, CANADA

ERFLE, DOUGLAS, VANCOUVER, CANADA

FRASER, JANET R., VANCOUVER, CANADA

WEST, MICHAEL H.P., VANCOUVER, CANADA

MCNICHOL, PATRICIA J., COQUITLAM, CANADA

PI US 2002035061 A1 20020321

US 6503881 B2 20030107

AI US 1998-30619 A1 19980227 (9)

RLI Continuation-in-part of Ser. No. US 1997-915314, filed on 20 Aug 1997,

GRANTED, Pat. No. US 6180604

PRAI US 1997-40649P 19970310 (60)

US 1997-60099P

19970926 (60)

US 1996-24754P 19960

19960821 (60)

US 1997-34949P 19970113 (60)

DT Utility

FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

CLMN Number of Claims: 94 ECL Exemplary Claim: 1 DRWN 33 Drawing Page(s)

LN.CNT 7074

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for treating infections, especially bacterial infections, are provided. Indolicidin peptide analogues containing at least two basic amino acids are prepared. The analogues are administered as modified peptides, preferably containing photo-oxidized solubilizer.

### L5 ANSWER 76 OF 81 USPATFULL

AN 2002:57611 USPATFULL

TI Liposome-enhanced test device and method

IN Durst, Richard Allen, Romulus, NY, United States Montagna, Richard A., Grand Island, NY, United States Baumner, Antje J., Romulus, NY, United States Siebert, Sui Ti A., Geneva, NY, United States Rule, Geoffrey S., Aurora, NY, United States

PA Cornell Research Foundation, Inc., Ithaca, NY, United States (U.S. corporation)

Innovative Biotechnologies International, Inc., Grand Island, NY, United States (U.S. corporation)

PI US 6358752 B1 20020319

AI US 1999-315576 19990520 (9)

RLI Continuation-in-part of Ser. No. US 1996-722901, filed on 27 Sep 1996, now patented, Pat. No. US 5958791

PRAI US 1998-106122P 19981029 (60)

US 1998-86190P 19980521 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Nguyen, Bao-Thuy L.

LREP Nixon Peabody LLP
CLMN Number of Claims: 28

ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 14 Drawing Page(s)

LN.CNT 1624

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A test device and method for detecting or quantifying an analyte in a test sample employs an interdigitated electrode array and electroactive marker-encapsulating liposomes for signal generation and

\*\*\*detection\*\*\* . The test device includes a contact portion on a first absorbent material, a capture portion either on the first absorbent material, or on a second absorbent material in fluid flow contact with the first absorbent material. The capture portion has a binding material specific for a portion of the analyte bound thereto. The device further includes an electrode array including first and second conductors each having a plurality of fingers, wherein the fingers of the conductors are interdigitated. The electrode array is positioned to induce redox cycling of an electroactive marker released either in or beyond the capture portion, depending upon whether direct (proportional) or indirect (inversely proportional) \*\*\*detection\*\*\* or measurement is desired. In the method of the invention, the test sample is applied to the contact portion, and allowed to migrate along the absorbent material(s) into the capture portion. Either before or after the migration, the test sample is contacted with a conjugate of liposomes

and a second binding material for the analyte. To the extent that analyte is present in the sample, the conjugate is bound in the capture portion. By applying a voltage across the conductors, redox cycling of the marker is induced and a current is generated.

L5 ANSWER 77 OF 81 USPATFULL

AN 2002:12261 USPATFULL

TI Uteroglobin-like polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002006640 A1 20020117

AI US 2001-846258 A1 20010502 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US30326, filed on 3 Nov 2000,

UNKNOWN

PRAI US 1999-163395P 19991104 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12076

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human uteroglobin-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human uteroglobin-like polypeptides. The invention further relates to

\*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human uteroglobin-like polypeptides.

L5 ANSWER 78 OF 81 USPATFULL

AN 2002:8489 USPATFULL

TI Retinoid receptor interacting polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002004489 A1 20020110

AI US 2001-788600 A1 20010221 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US22351, filed on 15 Aug 2000,

UNKNOWN

PRAI US 1999-148757P 19990816 (60)

US 2000-189026P 20000314 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11257

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human RIP polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells,

antibodies, and recombinant methods for producing human RIP polypeptides. The invention further relates to \*\*\*diagnostic\*\*\* and therapeutic methods useful for \*\*\*diagnosing\*\*\* and treating disorders related to these novel human RIP polypeptides.

### L5 ANSWER 79 OF 81 USPATFULL

AN 2001:136775 USPATFULL

TI Compositions and methods for \*\*\*diagnosing\*\*\* and treating conditions, disorders, or diseases involving cell death

IN Lo, Donald C., Chapel Hill, NC, United States
 Barney, Shawn, Apex, NC, United States
 Thomas, Mary Beth, Chapel Hill, NC, United States
 Portbury, Stuart D., Durham, NC, United States
 Puranam, Kasturi, Durham, NC, United States
 Katz, Lawrence C., Durham, NC, United States

PA Cogent Neuroscience, Inc., Durham, NC, United States (U.S. corporation)

PI US 6277974 B1 20010821 AI US 1999-461697 19991214 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Robinson, Patricia

CLMN Number of Claims: 12 ECL Exemplary Claim: 1

DRWN 262 Drawing Figure(s); 92 Drawing Page(s)

LN.CNT 4670

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to compositions and methods for the treatment and \*\*\*diagnosis\*\*\* of conditions, disorders, or diseases involving cell death. The invention encompasses protective nucleic acids which, when introduced into a cell predisposed to undergo cell death or in the process of undergoing cell death, prevent, delay, or rescue the cell from death relative to a corresponding cell into which no exogenous nucleic acids have been introduced. The invention encompasses nucleic acids of the protective sequence, host cell expression systems of the protective sequence, and hosts that have been transformed by these expression systems, including transgenic animals. The invention also encompasses novel protective sequence products, including proteins, polypeptides and peptides containing amino acid sequences of the proteins, fusion proteins of proteins, polypeptides and peptides, and antibodies directed against such gene products. The invention further relates to target sequences, including upstream and downstream regulatory sequences or complete gene sequences, antibodies, antisense molecules or sequences, ribozyme molecules, and other inhibitors or modulators directed against such protective sequences, protective sequence products, genes, gene products, and/or their regulatory elements involved in cell death. The present invention also relates to methods and compositions for the \*\*\*diagnosis\*\*\* and treatment of conditions, disorders, or diseases, involving cell death, including, but not limited to, treatment of the types of conditions, disorders, or diseases, which can be prevented, delayed or rescued from cell death and include, but are not limited to, those associated with the central nervous system, including neurological and psychiatric conditions, disorders, or diseases, and those of the peripheral nervous system. Further, the invention relates to methods of using the protective

sequence, protective sequence products, and/or their regulatory elements for the identification of compounds that modulate the expression of the protective sequence and/or the activity of the protective sequence product. Such compounds can be useful as therapeutic agents in the treatment of various conditions, disorders, or diseases involving cell death.

#### L5 ANSWER 80 OF 81 USPATFULL

AN 2001:14460 USPATFULL

TI Compositions and methods for treating infections using analogues of indolicidin

IN Fraser, Janet R., Vancouver, Canada

West, Michael H. P., Vancouver, Canada

Krieger, Timothy J., Richmond, Canada

Taylor, Robert, White Rock, Canada

Erfle, Douglas, Vancouver, Canada

PA Micrologix Biotech Inc., Vancouver, Canada (non-U.S. corporation)

PI US 6180604 B1 20010130

AI US 1997-915314

19970820 (8)

PRAI US 1996-24754P

19960821 (60)

US 1997-34949P

19970113 (60)

DT Utility

FS Granted

EXNAM Primary Examiner: Celsa, Bennett

LREP Seed Intellectual Property Law Group PLLC

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 39 Drawing Figure(s); 19 Drawing Page(s)

LN.CNT 3106

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for treating infections, especially bacterial infections, are provided. Indolicidin peptide analogues containing at least two basic amino acids are prepared. The analogues are administered as modified peptides, preferably containing photo-oxidized solubilizer.

# L5 ANSWER 81 OF 81 USPATFULL

AN 2000:170624 USPATFULL

TI Assay device using shrink wrap

IN Shuler, John K., Baltimore, MD, United States

PA Becton Dickinson and Company, Franklin Lakes, NJ, United States (U.S. corporation)

PI US 6162398

20001219

AI US 1998-60879

19980416 (9)

DT Utility

FS Granted

EXNAM Primary Examiner: Le, Long V.; Assistant Examiner: Gabel, Gailene R.

LREP Weintraub, Esq., Bruce S.

CLMN Number of Claims: 32

ECL Exemplary Claim: 1

DRWN 17 Drawing Figure(s); 5 Drawing Page(s)

**LN.CNT 935** 

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Devices for conducting an assay are disclosed which utilize shrink wrap as a casing material. The use of shrink wrap casings enables the preliminary fluid filtering step and the chemical \*\*\*detection\*\*\*

step to be combined, provides improved control over the flow of fluids into and through the assay device and reduces the time, material, effort, expense and risk of contamination involved in conducting assays.